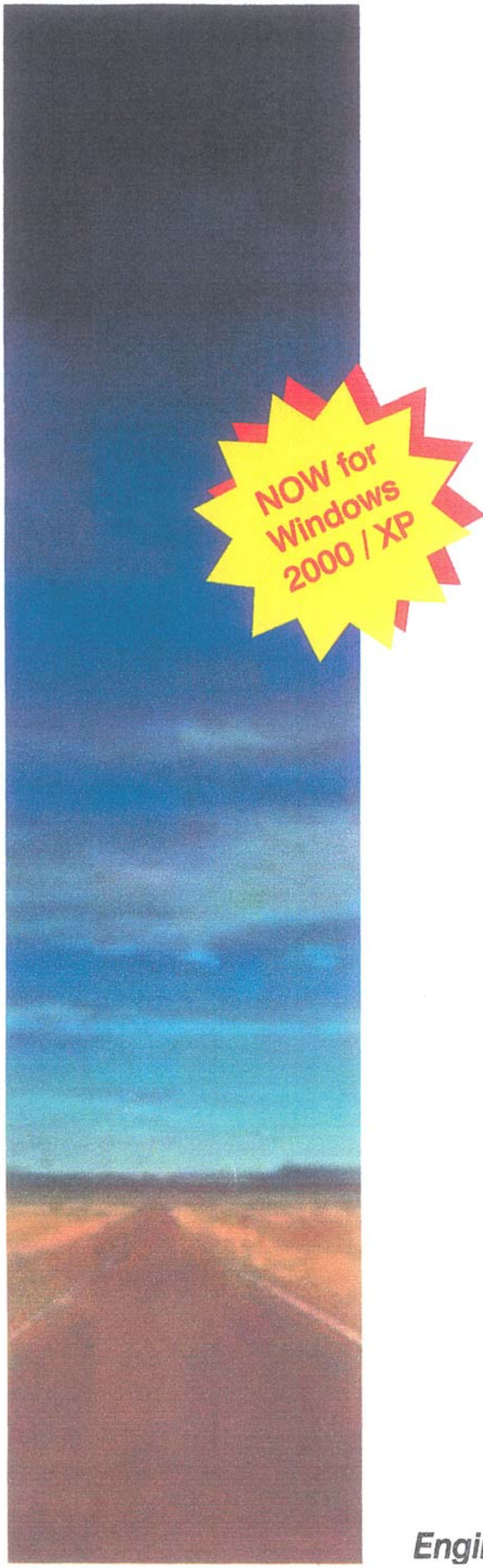

ProFuel

Fleet Fuel Management

***Fleet Fuel Control
Made Simple***

Version 3.1

Engineered Solutions by: COMPUTROL

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ProFuel

Fleet Fuel Management

User Manual

Revision 3.1

Computrol Fuel Systems Inc.
107-1533 Broadway Street
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Canada, V3C 6P3

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Chapter 1 : Introduction and Installation

Introduction

Welcome to ProFuel, a dynamic new program, which harnesses the power of Windows operating systems and modern network technology. ProFuel is a complete solution for the management of a Fleet's fuelling operations, easily handling the control, reporting, and billing of automated fuel records from any number of Computrol Pump Control Units or PCUs. ProFuel operates effectively under Windows 98, NT, 2000, and XP.

With easy to operate data screens and new automated routines, **ProFuel** simplifies the task of daily fuel management and provides a wealth of new features including:

- Managing your vehicle fuels in a complete Windows environment.
- Tracking and reporting fuel movement by account, by vehicle, and by employee.
- Tracking and reporting pump deliveries and tank inventories by product, location, and cost.
- An optional, unattended polling routine allows you to schedule transaction data collection any time, any day, for any of your fuel sites
- Automated routines quickly download customer, vehicle, and personnel authorizations from the ProFuel database to any or all of the PCUs in your network. You can even download PINs, meter readings, and fuel limits where the PCU software configuration permits.
- Universal Users' Screen allows you to track all individual fuel users, whether customers, vehicles, or personnel.
- Universal Transaction Screen allows you to manually enter non-cardlock transactions and bulk fuel deliveries.
- Download routines allow you to quickly update your customer card authorization tables
- Powerful and flexible Crystal Reports provides, on demand, a wide range of selectable reports on fuel usage and vehicle performance.
- All data is managed in Microsoft's powerful Access Database, which allows you to move key data to other Windows applications including your accounting and fleet management programs.
- ProFuel Plus, an optional version, provides for the assignment of taxes and discounts to cardlock transactions and can generate commercial invoices.

Installing ProFuel

System Requirements

In order to run **ProFuel** you should have:

- PC with 400MHz processor or higher with Windows 98/NT/2000/XP (Internet Explorer 5.5 or higher)
- 128 MB of RAM
- An 1024 x 768 Display
- At least 50 MB of free hard disk space
- Serial Port connection to your PCU via direct cable, modem or network

Loading and Initialization

The following loading sequence is required:

- Put the disk in the computer.
- Go to the Windows 'START' menu and Click on 'Run ...'
- Type in 'D:\setup' where 'D' is the letter of your CDROM or Floppy drive
- Click 'OK' and the ProFuel Setup utility will copy all necessary files to your computer and set up the program icon. The default installation directory is 'C:\Program Files\ProFuel\'.

Registration

When Setup has completed, use the **ProFuel** icon on the desktop to run the program. You will be prompted to enter your registration code. Computrol will supply a registration code based on the company name you wish to use. Each copy of **ProFuel** you use requires a unique registration code.

Note: When entering your Company Name on the registration screen, it must be entered exactly as it was provided with the Registration Code. If you choose to include commas in the name e.g. Fuelstop, Inc. then you must enter the name in quotation marks e.g. "Fuelstop, Inc."

Screen 1 – Registration

Installing ProFuel on a Network

Should you wish to provide access to the **ProFuel** database from more than one workstation, current versions of **ProFuel** can be installed with the database on your Server. Daily operating functions are still run from any of the **ProFuel** workstations.

Each workstation running **ProFuel** requires a license from Computrol. Contact the factory or your dealer for details.

To install **ProFuel** on your principal workstation, simply load the CD as detailed on the previous page. The principal workstation is the computer which is connected to the Pump Control Units.

To install the **ProFuel** database on your Network Server, follow these steps:

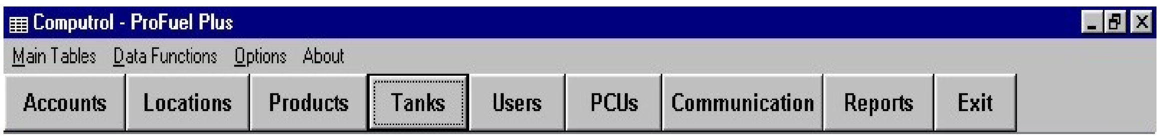
- Use *Windows Explorer* to locate the server directory you have chosen for the networked database.
- In *Windows Explorer* use *Tools* then click on 'Map Network Drive' to map the selected directory as a drive. The automated designation, such as F:, K:, or Y: can be used and will make all future references to the directory easier.
- Use *Windows Explorer* to copy the file named **'main.mdb'** from the ProFuel directory to that network directory then rename the local **'main.mdb'** to something like **'main.org'**
- In the local **ProFuel** directory select **'profuel.ini'** and edit with *Notepad* to set the path to network database directory. Note: the last character must be a '\' (For example the line Path =C:\Program Files\ProFuel\ changes to K:\ProFuel\).

Please Note: It may be necessary to synchronize the desktop icon after moving or renaming the database file. If the program does not access the d-base properly use *Windows Explorer* to delete the desktop shortcut to ProFuel and create a new one.

Navigating ProFuel

Main Screen

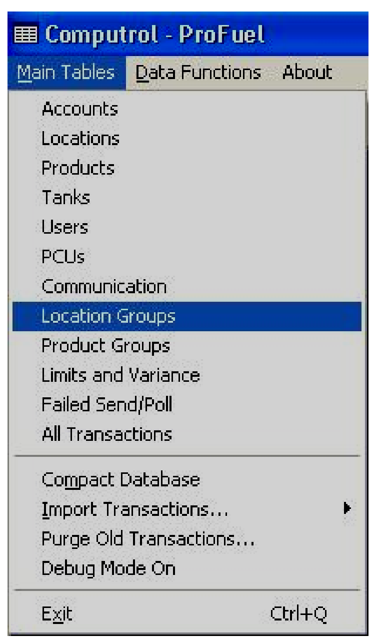
Initially the splash screen will appear with your registration name, followed immediately by the Main program window and main button bar. Each button provides direct access to the part of the database written on the button. e.g. Accounts, Locations, Products, Tanks, Users and PCUs.



Screen 2 – Main Button Bar

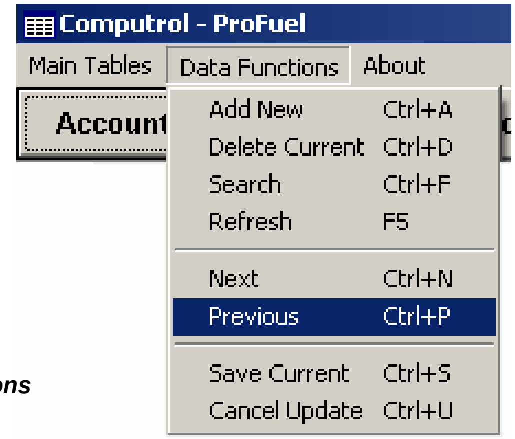
The Communication button calls the **ProFuel** screens you will use to connect to your PCUs manually and to use the feature called Polling and Sending Cards. This feature is used to collect data from the cardlocks and to automate the card management in the PCUs.

Clicking on the words **Main Tables** provides a drop down menu containing all of the system's functions including those accessed by the main buttons. The *Location Groups, Product Groups* and *Limits and Variances,* are used in the first steps of setting up the database. They are only accessed through the "Main Tables" menu shown below.



Screen 3 – Main Tables Drop Down Menu

The drop-down menu from the **Data Functions** button is shown below and contains useful instructions for all users. The commands for manipulation of records in your database are shown here along with a keyboard shortcut for each one.



Screen 4 – Data Functions Drop Down Menu

Add New creates a new record in the database and fills in any default values. If you are adding multiple records, **Add New** also saves the changes you have already made.

Delete Current removes the current record (the one displayed on your screen) from the database. There is no 'Undelete', but you will be prompted for confirmation.

Search is used to locate the first record in the database matching your search criteria. You simply type in the value for the field you want to search and click **Find First**. If it finds a match then the matching record becomes the current record, otherwise the old value in that field is restored and you are informed that the search was unsuccesful. All fields may be searched in this way. You may also use Wildcards when searching (i.e. '*' and '?') to represent missing words or letters. Searches are not case sensitive. **Find Next** begins searching from the current record and not from the beginning.

Next is used to move forward one record, **Previous** is used to move back one.

Refresh can be used to re-read field values from the database. This is useful if you are editing in more than one screen at a time.

Save Current saves the values in the current record to the database. Once a value has been saved, it cannot be 'unsaved'. Records are also saved when you move to another record, click **Add New**, or close a window.

Cancel Update can be used to **Cancel** changes to a record (Undo). It must be done *before* the record is saved.

Tips on Entering Your Data

Required Fields

On each of the main screens there are certain required fields that must be entered. They are indicated by red field labels, instead of the normal black.

Screen 5 - Sample for Navigation

Short-cut Keys

When you see a underlined letter in a word it usually means there is a shortcut programmed to that button. When a button is appears with the word Product using the ALT+P keys has the same effect as a mouse click on the button. This is useful to know when a great deal of data entry is required and you find it more comfortable to use the keyboard for some actions and avoid some switching to mouse and back.

Also in many cases it is possible to use the TAB key to move from box to box in a single data entry screen. The TAB should move in an orderly or logical flow.

Record Navigation

At the bottom of most data entry or database record screens is the Navigation Bar shown below. The convention used is made consistent on as many of the screens as possible

To move from record to record in the selected database you can use the navigation buttons located on the Record Navigation bar. These buttons will allow you to move to the first record, the previous record, move to the next record, and move to the last record. You can also add a new record, delete a record, save or cancel changes to a record and close the database.

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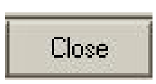
New records can be created by using a mouse to click the Add New button or by typing CTRL+A on the keyboard. The record's data fields will be blank.

The Delete button or the keystrokes CTRL+D will cause the selected record to be Deleted. A confirmation box will appear and you must select Yes to delete or No if unsure. There is no Undelete and deleting a current record can create a lot of extra work.

The Save button or the keystrokes CTRL+S will cause the record to be saved. This is regardless of whether changes have been made or not.

When the record displayed has been changed BUT NOT SAVED, you may cancel the actions you have taken to modify the record by using the Cancel button or CTRL+U for Cancel Update. If the changes have been saved you cannot undo them but you can change them back and save.



If you have finished or wish to complete some other task you can Close the current screen with a mouse click on the Close button. There are no keyboard shortcuts for Close.

Searching for Data Records and Information

At times you will need to search for a record in the database. You may be searching to find PCU number 31 or the name of the person using card number 45675.

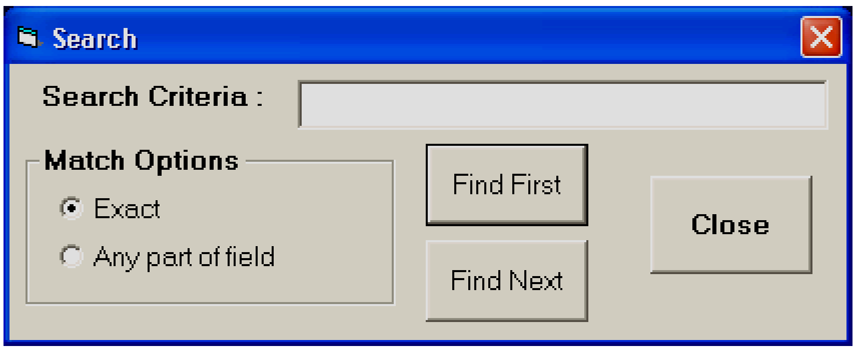
There are two main ways to call the search window in ProFuel. You can use the Data Functions and click on Search in the drop down choices or simply type the keyboard shortcut; Ctrl+F. Either method will call the search window shown below.

Once you have typed the criteria you wish to search by you select the Find Next or Find First buttons. The system will find the first or next record matching your request. Find First allows you to search for the 'first' matching record from your current position in the record file. Find Next will search display the matching record closest to the starting position.

Search Window Feature

To search for random data in any field:

- Open the appropriate master screen
- Place the cursor on the field to be searched
- Press Ctrl + F on the keyboard to bring up the 'Search Window'
- Enter the data to be searched for
- Click <Find First> or <Find Next> to display a matching record.



Screen 6 - Search Window Screen.

The methods of navigation described above are useful to all operators and help in the swift and smooth movement through the ProFuel management screens. Use the Data Functions Button to refresh your memory any time.

Try different methods of navigating through the ProFuel Screens until you find the best way for you.

Chapter 2 : Entering Your Database

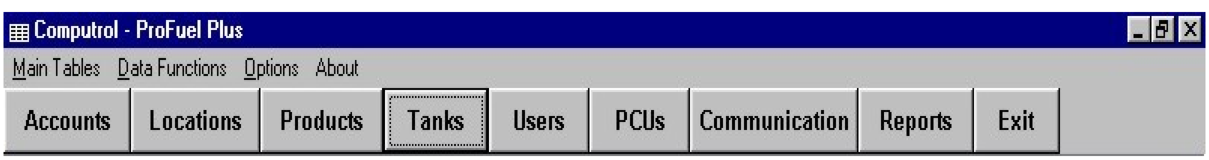
Overview

ProFuel uses a series of inter-related data file records to process each set of incoming transactions. The transaction records are processed and compiled against the ProFuel data file records into comprehensive consumption and performance reports. In order to run the ProFuel system, you must first set up these data records to match the unique characteristics of your fuelling operation.

The order in which you program your database may vary, but for ease of use, it is suggested that you follow the sequence listed on the next page under **Logical Order of Modules Setup.**

System Set-Up Screens

All modules of the ProFuel system can be accessed through the Main Menu button bar shown below and through the Main Menu drop down menus. Details of each of these buttons and menus are described in this section of the manual.



Screen 7 - Main Screen - Menu button bar

Please Note: PCUs work from their own lists of authorized cards. Entering a card into the ProFuel database does not make it valid in the PCUs. You must use the **Communication** button an SEND the cards to the PCUs. Once this is done the card can be used to turn the pump on.

Logical Order of Modules Setup

The logical setup sequence is the easiest way to start entering the data ProFuel requires. This order helps you avoid unnecessary switching back and forth between screens as you enter the data and become familiar with the program.

1. **Products** – identify each unique product you dispense. Product names are used later to define Product Groups, Tanks and PCUs (Pump Control Unit)
2. **Product Groups** – even if you have only one product, you must create Product Group(s) so ProFuel can automate the sending of authorizations to the cardlock PCUs. Group the products as vehicles or people will use them, i.e.: all products, diesel only, unleaded only. Every card will be assigned a Product Group.
3. **Locations** – identify the individual sites where the PCUs are installed. You may have a single location with several PCUs or many locations.
4. **Location Groups** – as with the Product Groups above, each card must be assigned a Location Group. This is done whether there are one or multiple sites. Please set up Location Groups which reflect the way vehicles and people will use the system. You may need one group that contains All Locations, a group that contains only one location or any combination between the two.
5. **Tanks** – enter information to be used for inventory control reporting. If your tank database is set up to reflect the tanks at your fuel sites then the inventory reports produced by ProFuel will be more meaningful. Tanks that are piped together may be entered as a single tank.
6. **PCUs** – details of each Pump Control Unit (PCU). This will include pump numbers and order, communication and connection information such as phone numbers, and even the Baud Rate.
7. **Accounts** – enter the details for each customer including: names, addresses, discounts, etc.
8. **Users** – cardholders or numbers to identify the cardlock users will need to be entered next.

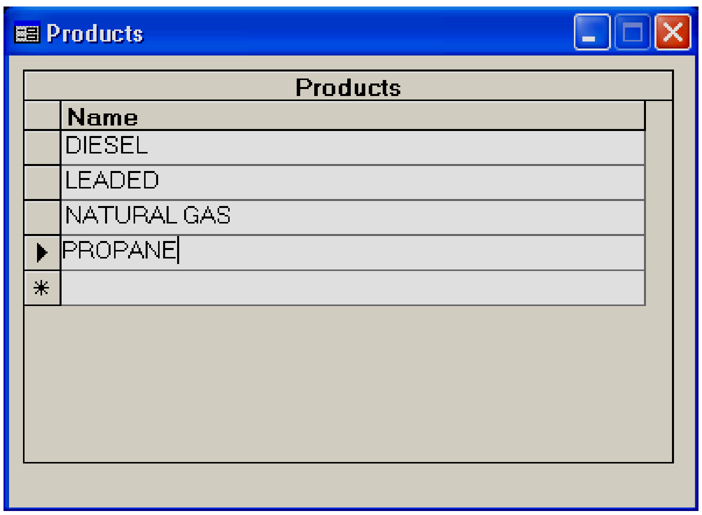
Please Note: Detailed instructions regarding each of the above modules and screens are found in this manual. There may be additional Database entries to set up for ProFuel Plus users. See Chapter 4: ProFuel Plus Invoicing and Features for the additional information.

Products Database

The Products database is used to record the names of the products that are sold. Products are used in the setup of various tables in the system including Tanks, Product Groups, and PCU pump setup.

To access the **Products** screen, select the 

button from the menu at the top of your screen. It can alternatively be accessed by selecting the *Products* option under the <Main Tables> menu also located at the top of your screen.



Screen 8 – Products

Type the name (up to an 18-character maximum) of the fuel, or any other product. To create a new record enter the new product name beside the " ***** ". When you hit the Tab Key or the Enter Key the record you entered will be created in the database. A new blank line with an " ***** " asterisk will appear.

Editing Product Names

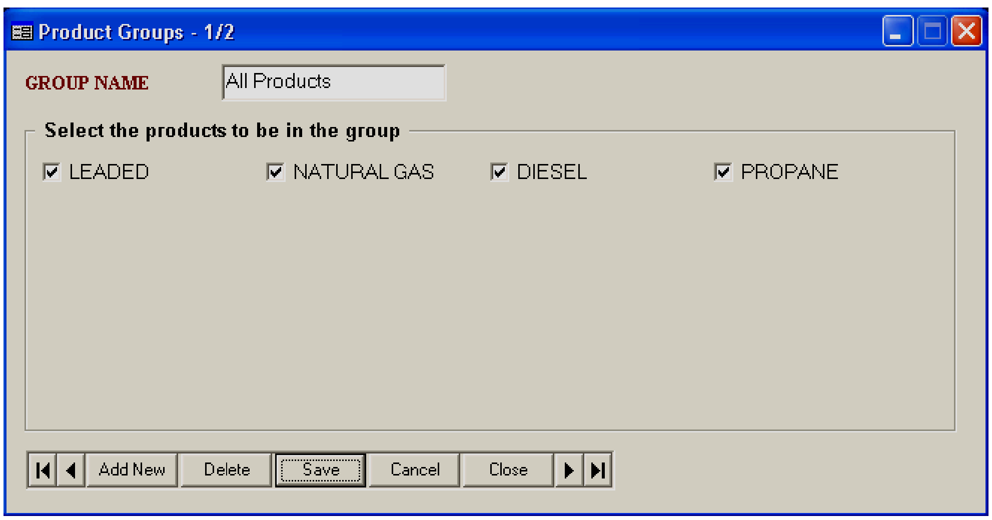
Use your mouse to select the record that you wish to change and simply type over the name that was there. Since this is the lowest layer of data in the ProFuel system, the standard navigation tools described previously and used in all other database records are not necessary. Once you enter the new name it becomes part of the database. There is no Save button.

Product Groups

A Product Group is assigned to each User (cards or vehicles). A Product Group will contain all of the products that user is allowed or required to use. If no restrictions are required then you can create a single Product Group containing All Products and each user will be assigned the Product Group called All Products.

The ProFuel system uses the Product Group to enable cards and numbers properly with the Send Cards feature. Sending Cards is the automated method ProFuel Uses to get vehicle and people authorized in the PCUs or Cardlocks in the field. The ProFuel system will enable your numbers so they can use each pump that dispenses the products listed in the Product Group assigned.

To access the **Product Groups** screen, select ***Product Groups*** option under the **<Main Tables>** menu located at the top of your screen.



Screen 9 – Product Groups

Record Navigation in the Product Groups Database Records

At the bottom of the Product Groups database screen is the Navigation Bar shown below.

New records can be created by using a mouse to click the Add New button or by typing CTRL+A on the keyboard. The record's data fields will be blank.

The Delete button or the keystrokes CTRL+D will cause the selected record to be deleted. A confirmation box will appear and you must select Yes to delete or No if unsure. There is no undelete feature and deleting a 'current' record may cause extra work.

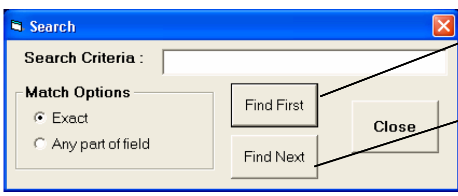
The Save button or the keystrokes CTRL+S will cause the record to be saved. This is regardless of whether changes have been made or not.

When the record has been changed BUT NOT SAVED, you may cancel the actions you have taken to modify the record by using the Cancel button or CTRL+U for Cancel Update. If the changes have been saved you cannot undo them but you type changes and Save them.

If you have finished or wish to complete some other task you can Close the current screen with a mouse click on the Close button. There are no keyboard shortcuts for Close.

Search Window

- Place the cursor on the field to be searched
- Press Ctrl + F on the keyboard to bring up the 'Search Window'
- Enter the data to be searched for
- Click <Find First> or <Find Next> to display a matching record.



Find First searches from the top or the first record

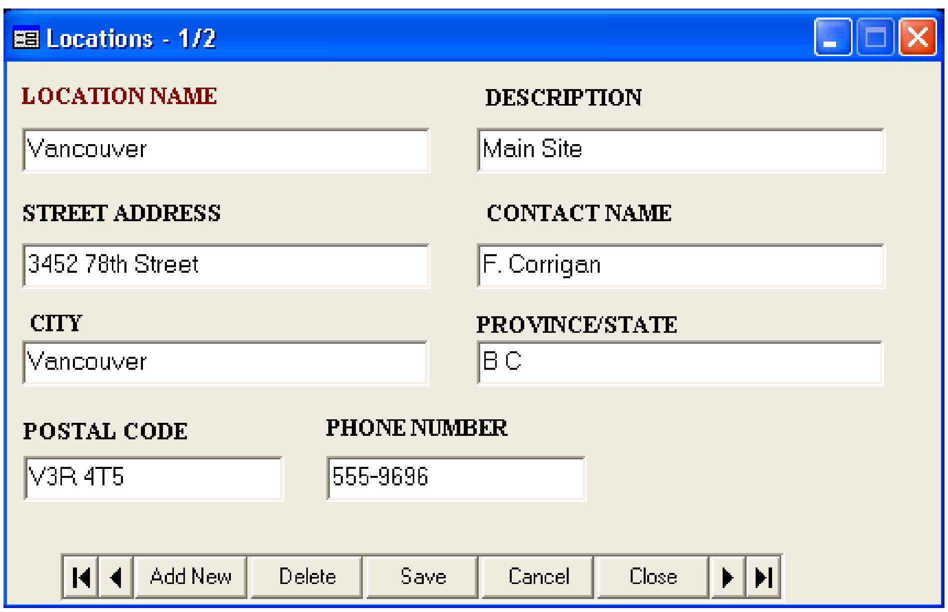
Find Next searches from the current record position

Locations Database

The **Locations** screen is used to identify the name of the site where each PCU (Pump Control Unit) is installed. Location Names are used to define where one or more PCUs may be installed so the site can be automatically polled using the **Communication** Screen.

Additionally, **ProFuel** will provide automated download of card/vehicle authorizations. The Location names will be used to create programmable Location Groups (Screen 10) to which cards or vehicles are restricted and authorized accordingly using the Send Cards feature.

To access the **Locations** screen, select the  button from the button menu at the top of your screen. It can alternatively be accessed by selecting the *Locations* option under the <Main Tables> menu also located at the top of your screen.



Screen 10 – Locations

Record Navigation in the Locations Database Records

At the bottom of the Locations database screen is the Navigation Bar shown below.

New records can be created by using a mouse to click the Add New button or by typing CTRL+A on the keyboard. The record's data fields will be blank.

The Delete button or the keystrokes CTRL+D will cause the selected record to be deleted. A confirmation box will appear and you must select Yes to delete or No if unsure. There is no undelete feature and deleting a 'current' record may cause extra work.

The Save button or the keystrokes CTRL+S will cause the record to be saved. This is regardless of whether changes have been made or not.

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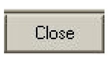

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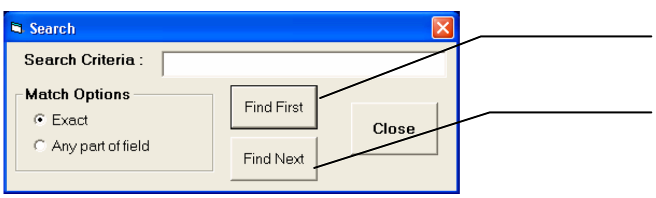


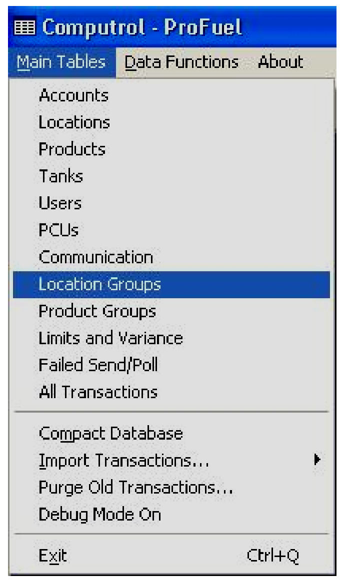
Find First searches from the top or the first record

Find Next searches from the current record position

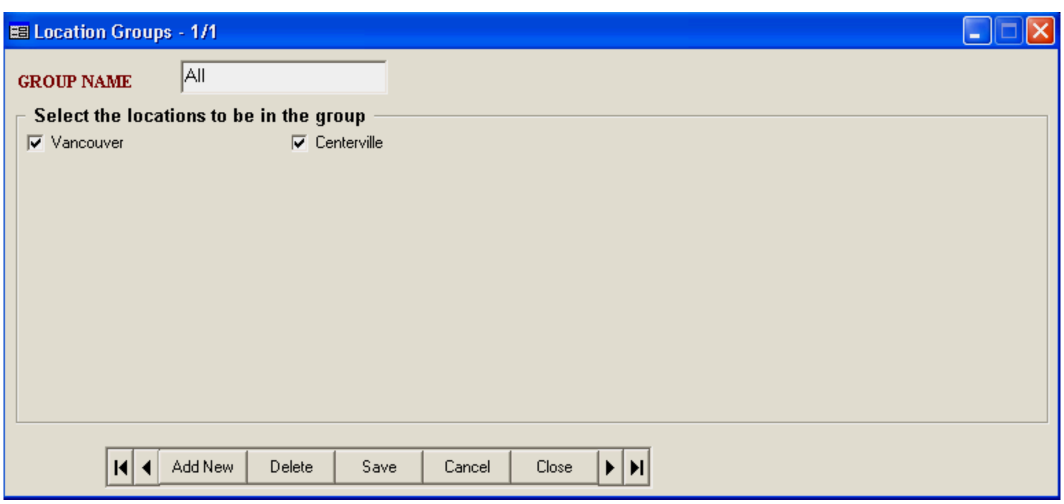
Location Groups

The Locations Groups screen allows you to set up a group of locations that a user would be allowed to use. To access the **Location Groups** screen, select *Location Groups* option under the <Main Tables> menu located at the top of your screen.

Location Groups



Screen 11 – Main Tables Dropdown Menu



Screen 12– Location Groups

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Creating a New Location Group

Use the Add New button to create an additional group. The group name may be up to 20 characters. Each Group can include one location only or any combination of locations. Location names appear because they were already entered into the database via the Location database screen.

Adding a Location to a Group

By checking or un-checking the small box beside a Location it is respectively included or removed from the Location Group

Record Navigation in the Location Groups Database Records

At the bottom of the Locations Groups database screen is the Navigation Bar shown below.

New records can be created by using a mouse to click the Add New button or by typing CTRL+A on the keyboard. The record's data fields will be blank.

The Delete button or the keystrokes CTRL+D will cause the selected record to be deleted. A confirmation box will appear and you must select Yes to delete or No if unsure. There is no undelete feature and deleting a 'current' record may cause extra work.

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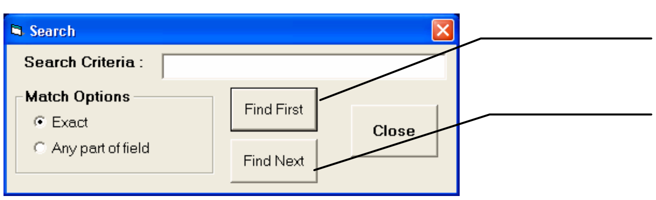


Find First searches from the top or the first record

Find Next searches from the current record position

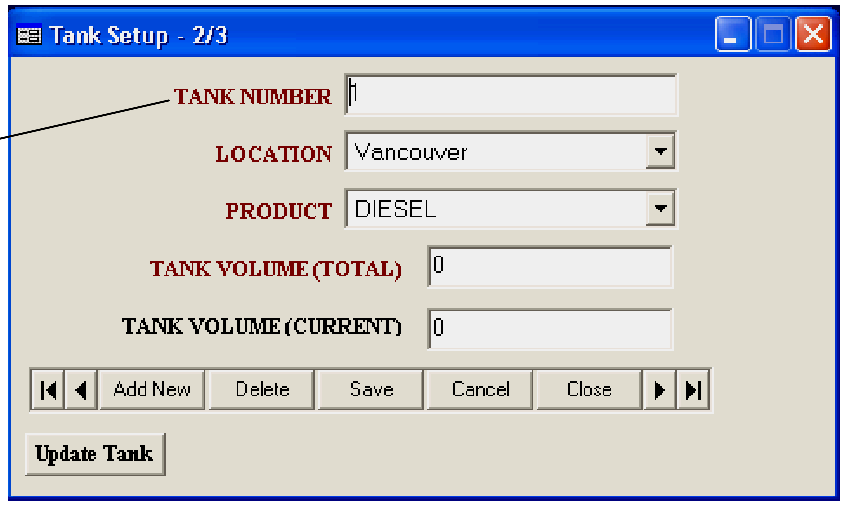
Tanks Database

This screen is used to add the tank information to your system. Each storage tank must be setup with a unique number, a location, a product, and tank volume.

To access the **Tanks** screen, select the 

button from the button menu at the top of your screen. It can also be selected under the <Main Tables> select *Tanks.*

Required Fields shown in RED



Screen 13 – Tanks

<u>Adding a New Tank</u>

Using the screen navigation buttons, select the 

button with your mouse. This will clear all the fields of their information so that you are able to enter in the new information. You can navigate in this screen by selecting the individual fields with your mouse cursor or by using your [TAB] key.

Please Note*:* Fields that are identified with a RED heading *must be* completed. e.g. in this screen, the **Tank Number, Location, Product and Tank Volume (Total)** fields must be completed.

Tank Number – enter the tank number

Location – select from the drop-down menu. The entries shown were previously entered into the database from the Location screen.

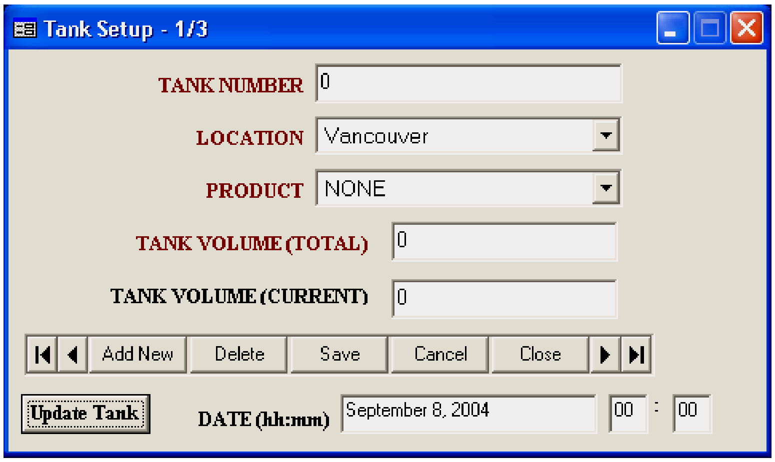
Product – select from the drop-down menu. The entries shown have been previously entered into the database previously using the Product screen.

Tank volume (total) – input the size or capacity of the tank

Tank Volume (Current) - is a calculated field and can be left at zero when the tank is first setup. To first initialize the tank you must add the fuel to the tank using the **Update Tank** button.

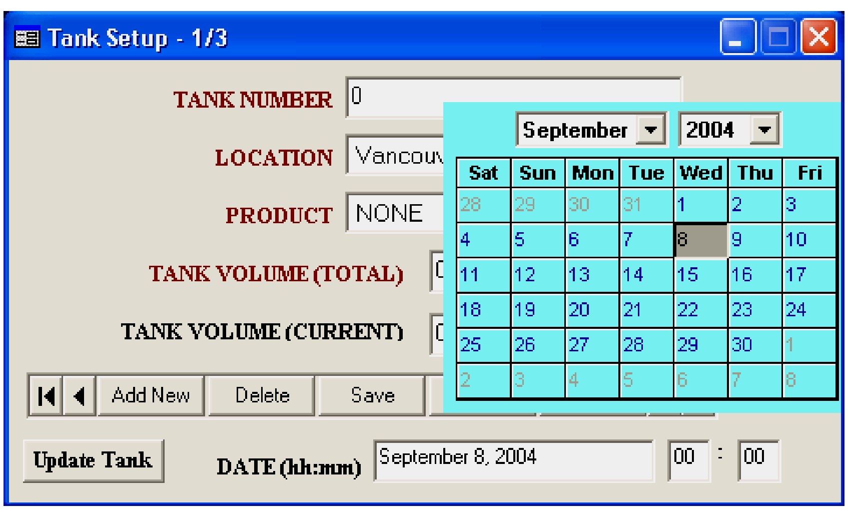
Entering or Adjusting the Tank's Current Volume

Update Tank provides the ability to make adjustments to the tank inventory directly from the Tank Database screen. Once the tank setup has been completed and saved, click on the button to see the additional fields for entry of the date and time the last measurement was taken.



Screen 14 – Tank Screen for Update

A useful calendar will appear when a mouse double-clicks in the date information box. If the mouse hovers over that box (where September 8, 2004 appears above) the system will provide the navigational hint.



Screen 15 – Tank Screen for Update

Steps to Enter or Adjust the Tank's Current Volume

Select the day of the tank dip or measurement and the calendar will disappear.

Enter the time of the Dip or Measurement in 24-hour format.

Enter the measured volume in the Tank Volume (Current) box overwriting the number that was there and ProFuel will justify all inventory values accordingly to this point. Use the Save button to record the changes.

Record Navigation in the Tanks Database Records

At the bottom of the Tanks database screen is the Navigation Bar shown below

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New records can be created by using a mouse to click the Add New button or by typing CTRL+A on the keyboard. The record's data fields will be blank.

The Delete button or the keystrokes CTRL+D will cause the selected record to be deleted. A confirmation box will appear and you must select Yes to delete or No if unsure. There is no undelete feature and deleting a 'current' record may cause extra work.

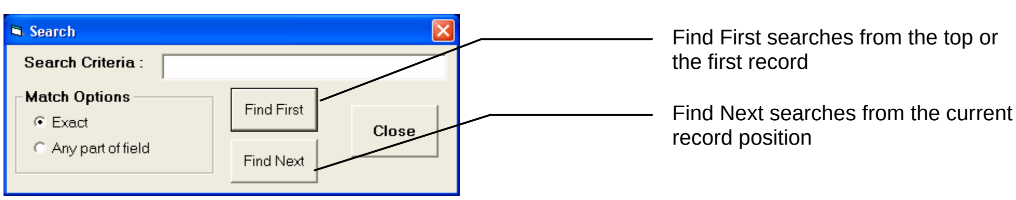
The Save button or the keystrokes CTRL+S will cause the record to be saved. This is regardless of whether changes have been made or not.

When the record has been changed BUT NOT SAVED, you may cancel the actions you have taken to modify the record by using the Cancel button or CTRL+U for Cancel Update. If the changes have been saved you can not undo them but you type changes and Save them.

If you have finished or wish to complete some other task you can Close the current screen with a mouse click on the Close button. There are no keyboard shortcuts for Close.

Search Window

- Place the cursor on the field to be searched
- Press Ctrl + F on the keyboard to bring up the 'Search Window'
- Enter the data to be searched for
- Click <Find First> or <Find Next> to display a matching record.

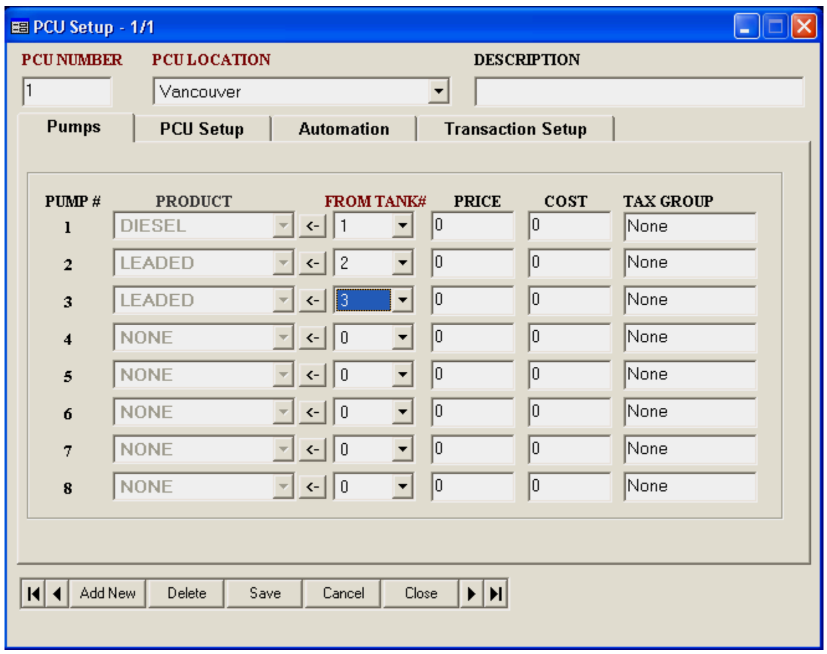


PCU Setup

This screen is used to enter information about the PCUs (Pump Control Units) that are part of the overall fuelling network. The screen captures the information including the individual pumps and the set-up for the PCUs, autopolling, manual polling and transactions.

To access the **PCU Setup** screen, select the 

button from the button menu at the top of your screen. It can alternatively be accessed by selecting the *PCUs* option under the <Main Tables> menu also located at the top of your screen.



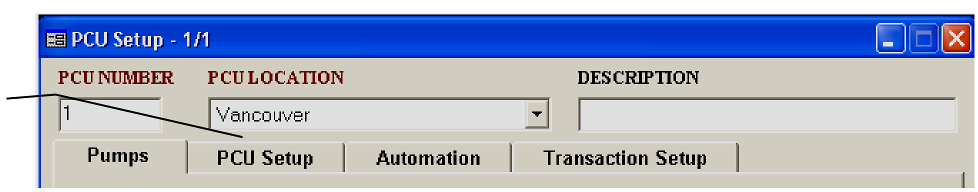
Screen 16 – PCU Setup screen

Adding a New PCU

Using the screen navigation buttons, select the 

button with your mouse. This will clear the top 3 fields of their information so that you are able to enter in the new information. Each new PCU that is setup will have to have the Pump, PCU Setup, Automation and Transaction Setup sections completed. These areas are accessed using the appropriate tab just below the PCU header information. Once all of the information on each of the 4 screens has been entered, you may <Save> the information and exit out of the screen.

Tabs to select setup screens like PCU Setup



Screen 17 – PCU Setup Tab

Use your mouse or the TAB key to navigate the individual fields in this screen.

Please Note: Fields that are identified with a RED heading *must be* completed. e.g. in the first 3 fields of this screen, the **PCU Number and PCU Location** fields must be completed.

PCU Number – this number *must be* unique. Typically they are 1, 2, 3 and so on.

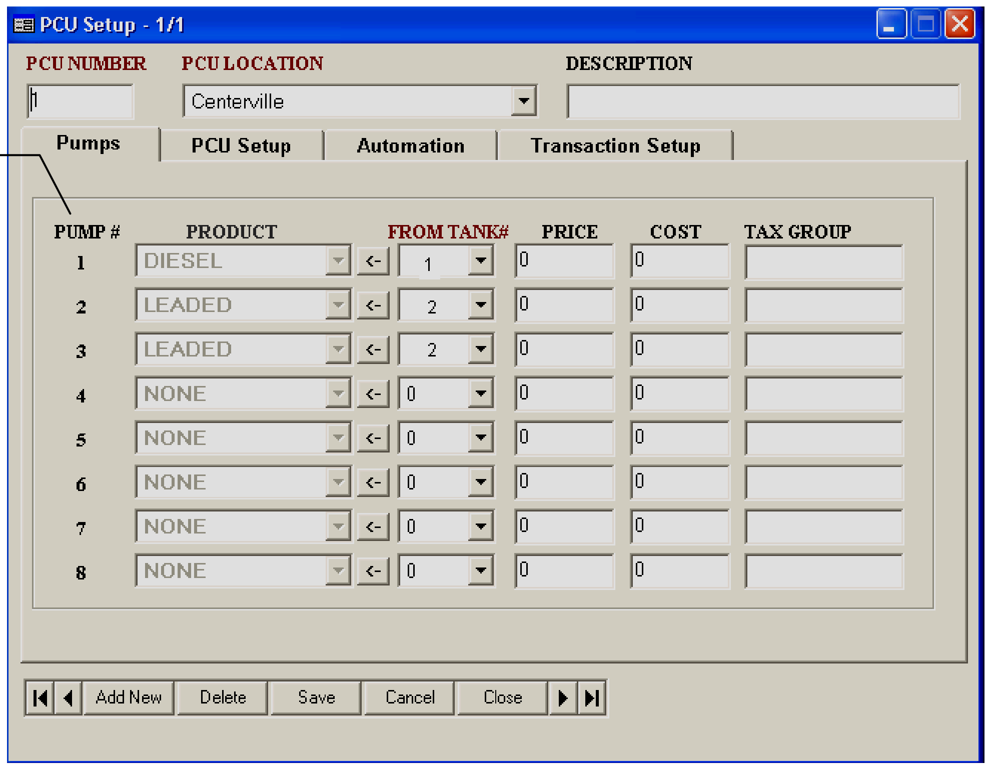
PCU Location – select a location from the drop-down menu. The entries shown have been previously entered into the database using the Location screen.

Description – optional field used to describe the PCU

Setting Up Pumps

To access the screen that allows you to enter the pump information as related to a specific PCU, select the <Pumps> tab on the PCU Setup screen.

Pumps Folder Tab



Screen 18 – Pump Setup Screen

To setup each of the 8 possible pumps (hoses), you must use the drop-down *From Tank#* menu to select the tank which supplies the product to the pump. Use the 

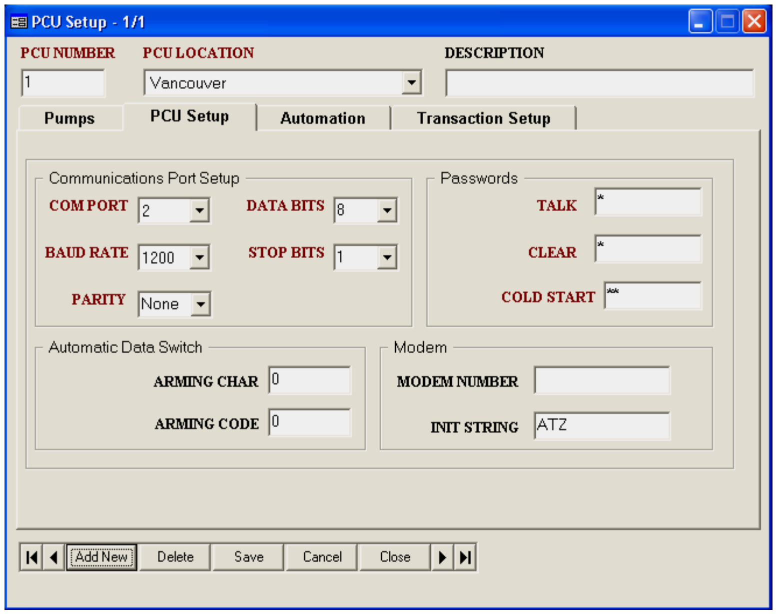
button and the product from the tank you selected will appear in the Product field. If it is not correct select another tank and use the 

again. Optionally a price, unit cost can be entered for the fuel at each pump. This information is used to keep track of tank balance and optionally the value of the fuel.

If you are using ProFuel the Tax Group column will not be displayed. This feature is only provided in the ProFuel Plus version.

PCU Setup Information - Communications

To access the screen that allows you to enter the communication parameters as related to a specific PCU, select the <PCU Setup> tab on the PCU Setup screen. This will cause the PCU Setup screen to appear.



Screen 19 – PCU Setup (communications) screen

The following communication parameters must be set up for each Pump Control Unit (PCU)

.

Com Port - For Polling to work the Comm. Port field must be completed. Select the correct COM port from the drop down menu.

Baud Rate – This field must be completed for polling to work. Select the appropriate Baud rate from the drop down menu. Typically this is 1200 or 2400 Baud.

Data Bits – This field must be completed for polling to work. Select the appropriate Data Bits from the drop down menu. Typically this is set for 8 bits.

Stop Bits - This field must be completed for polling to work. Select the appropriate Stop Bits from the drop down menu. Typically this is set for 1 stop bit.

Arming Character – used for automatic data switches. Set to zero if you do not use an automatic switch. If used, enter a value in decimal format.

Arming Code – used for automatic data switches. Set to zero if you do not use an automatic switch. If used, enter a value in decimal format.

Talk Password – Must be completed. Used when communicating with the PCU. Factory default is ‘T’

Clear Password – Must be completed. Used when communicating with the PCU. Factory default is ‘C’

Cold Start Password – Must be completed. Used when communicating with the PCU.

Modem Number – If the PCU is on a modem, the number must be entered – otherwise, leave blank

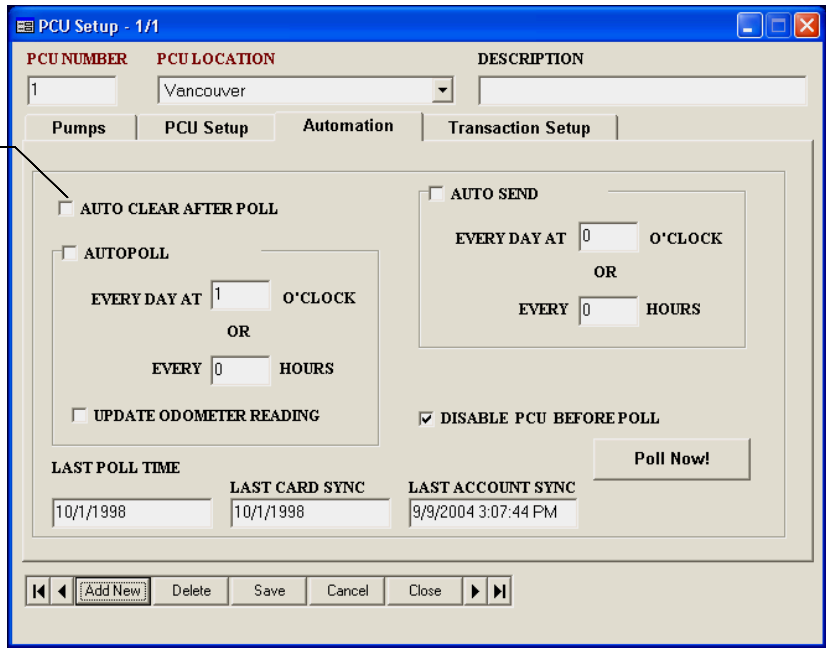
Init. String – If the PCU is on a modem, the initialization string must be entered – otherwise, leave blank.

Please Note: The PCU password cannot be changed here. It must be done using the *Communication/ Manual* screen.

Setting Up Autopoll / Manual Polling

The <Automation> tab on the PCU Setup screen provides access to the PCU Setup screen that allows you to enter the parameters Autopolling the PCU. After all testing has been completed; the Auto Clear After Poll box should be checked for normal operation. The Automation screen appears below.

Auto Clear After Poll Check Box Folder Tab



Screen 20 – Automaton or Automatic Polling setup screen

The **Automation** section of the PCU Setup screen is used to setup the time and frequency for automated (scheduled) polling. By default scheduled polling is disabled.

If you require the PCU(s) to be polled without initiation by staff you will need to set up the **Autopoll** section of the screen.

If you require the cards or Authorizations to be sent to the PCU(s) without initiation by staff you will need to set up the **Auto Send** section of the screen.

The **LAST POLL** and **LAST CARD SYNC** and **LAST ACCOUNT SYNC** (special feature) times are displayed in the window.

Select the **Update Odometer Reading After Autopoll** box if you wish to have the odometer updated in the system after every fill. This is used in conjunction with the PCU's Odometer Checking Feature.

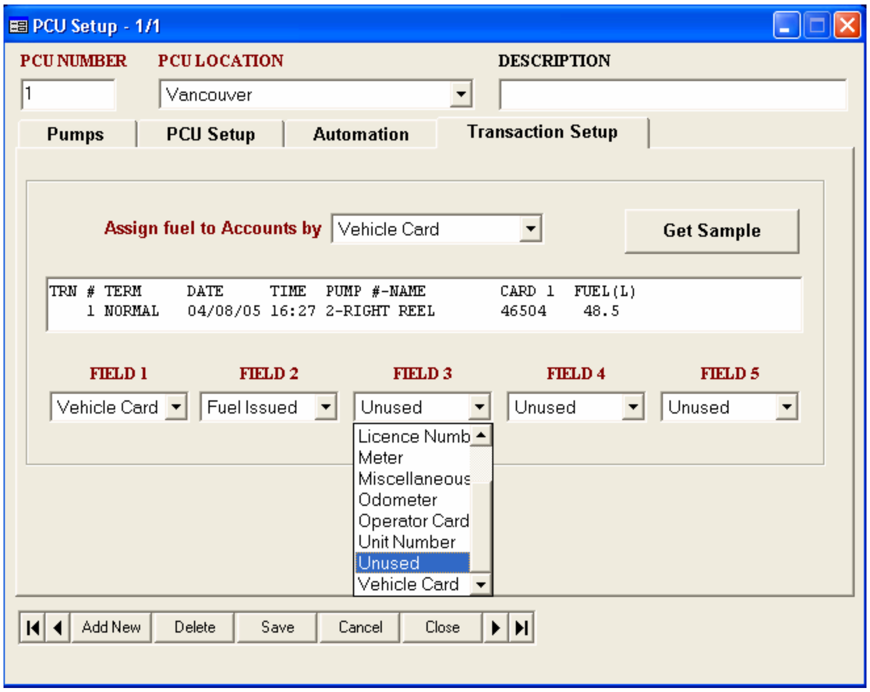
To poll a particular this PCU right away, you can click the 

button. Most polling is performed from the Communications Screen. From there you may also select to poll 'All', 'All that are Autopolled', or All at a particular location.

With the **AUTOPOLL** option enabled, the system can operate totally unattended. In order for the automated polling to work, the computer must be on and have the program running.

PCU Transaction Setup

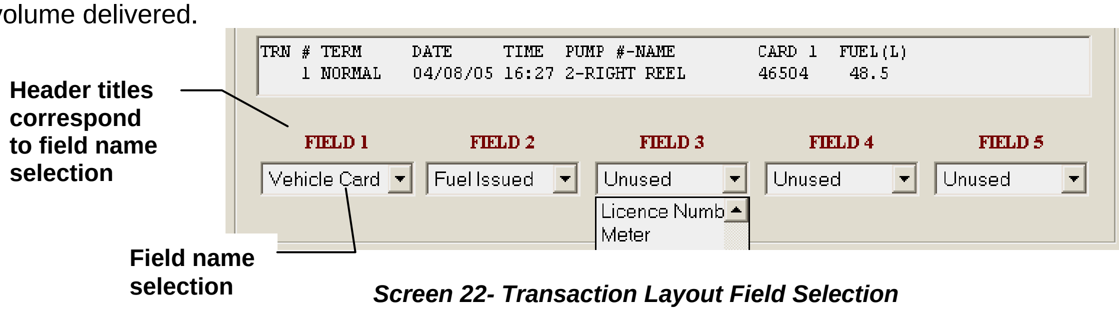
To access the screen that allows you to enter the parameters for the setup of the transaction data for Autopolling and manual polling as related to a specific PCU, select the <Transaction Setup> tab on the PCU Setup screen. This will cause the Transaction Setup screen to appear.



Screen 21 – PCU Transaction Setup screen

In order for the system to process the transaction information polled from a PCU(s), **ProFuel** needs to identify to what fields of information are in the transaction and what they relate to in the ProFuel Database. The first part of all PCU transactions is the same and includes Transaction # (TRN #), Termination Reason (Term), Date and Time with the Pump Number and Name.

The Identification Fields 1-5 include the Card Numbers or ID Numbers entered on the keypad, an optional meter reading or a Unit #. The final field in the transaction data line is the Fuel Issued or the volume delivered.



Screen 22- Transaction Layout Field Selection

It is necessary to program ProFuel to know what fields to expect following the Product Name and how they should be used in processing the transaction data.

Get Sample Transaction

Before you can see what your transaction format will be, you must first configure the PCU for the authorization and data capture you require. PCU configuration or 'Cold Start' is covered on pages 18 to 21 in the **PCU Users Manual.** Once configured, you must create at least 1 transaction. This transaction can then be imported to box Transaction Setup Screen by using the 

button.

In addition to defining the categories of the fields in the transaction, you must also tell ProFuel to assign the fuel in the transaction to Accounts either by the **Vehicle Card or the Operator card**. In the above example, the transactions are to be assigned by Vehicle Cards.

Record Navigation in the PCU Database Records

At the bottom of the Locations database screen is the Navigation Bar shown below.

New records can be created by using a mouse to click the Add New button or by typing CTRL+A on the keyboard. The record’s data fields will be blank.

The Delete button or the keystrokes CTRL+D will cause the selected record to be deleted. A confirmation box will appear and you must select Yes to delete or No if unsure. There is no undelete feature and deleting a ‘current’ record may cause extra work.

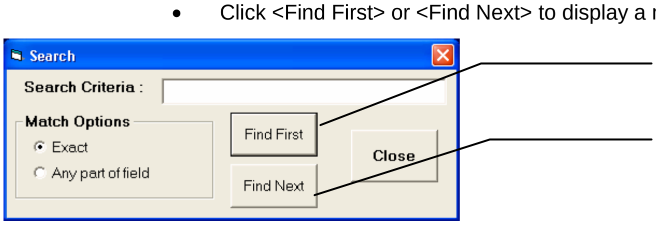
The Save button or the keystrokes CTRL+S will cause the record to be saved. This is regardless of whether changes have been made or not.

When the record has been changed BUT NOT SAVED, you may cancel the actions you have taken to modify the record by using the Cancel button or CTRL+U for Cancel Update. If the changes have been saved you can not undo them but you type changes and Save them.

If you have finished or wish to complete some other task you can Close the current screen with a mouse click on the Close button. There are no keyboard shortcuts for Close.

Search Window

- Place the cursor on the field to be searched
- Press Ctrl + F on the keyboard to bring up the ‘Search Window’
- Enter the data to be searched for
- Click <Find First> or <Find Next> to display a matching record.



Find First searches from the top or the first record

Find Next searches from the current record position

Accounts Database

Most system managers require that fuel cards or vehicles be assigned to specific accounts or cost centers. These centers may be customers, departments, or divisions. The **Accounts** Screen allows you to define to which Accounts the fuel transactions will be billed or charged.

To access the **Accounts / Department** screen, select the 

button from the button menu at the top of your screen. It can alternatively be accessed by selecting the *Accounts* option under the <Main Tables> menu also located at the top of your screen.

Account Number and Account / Department are in Red. They are key fields.

All other field titles are in black. They are optional

Screen 23- Accounts

<u>Adding a New Account</u>

Using the screen navigation buttons, select the 

button with your mouse. This will clear all the fields of their information so that you are able to enter in the new information.

You can navigate in this screen by selecting the individual fields with your mouse cursor or by using your [TAB] key.

Please Note*:* Fields that are identified with a RED heading *must be* completed. e.g. in this screen, the **Account Number** field and the **Account/Departmental Name** field must be completed. All other fields are optional.

Record Navigation in the Accounts Database Records

At the bottom of the Accounts database screen is the Navigation Bar shown below.

New records can be created by using a mouse to click the Add New button or by typing CTRL+A on the keyboard. The record's data fields will be blank.

The Delete button or the keystrokes CTRL+D will cause the selected record to be deleted. A confirmation box will appear and you must select Yes to delete or No if unsure. There is no undelete feature and deleting a 'current' record may cause extra work.

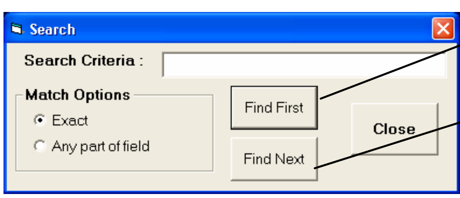
The Save button or the keystrokes CTRL+S will cause the record to be saved. This is regardless of whether changes have been made or not.

When the record has been changed BUT NOT SAVED, you may cancel the actions you have taken to modify the record by using the Cancel button or CTRL+U for Cancel Update. If the changes have been saved you can not undo them but you type changes and Save them.

If you have finished or wish to complete some other task you can Close the current screen with a mouse click on the Close button. There are no keyboard shortcuts for Close.

Search Window

- Place the cursor on the field to be searched
- Press Ctrl + F on the keyboard to bring up the 'Search Window'
- Enter the data to be searched for
- Click <Find First> or <Find Next> to display a matching record.



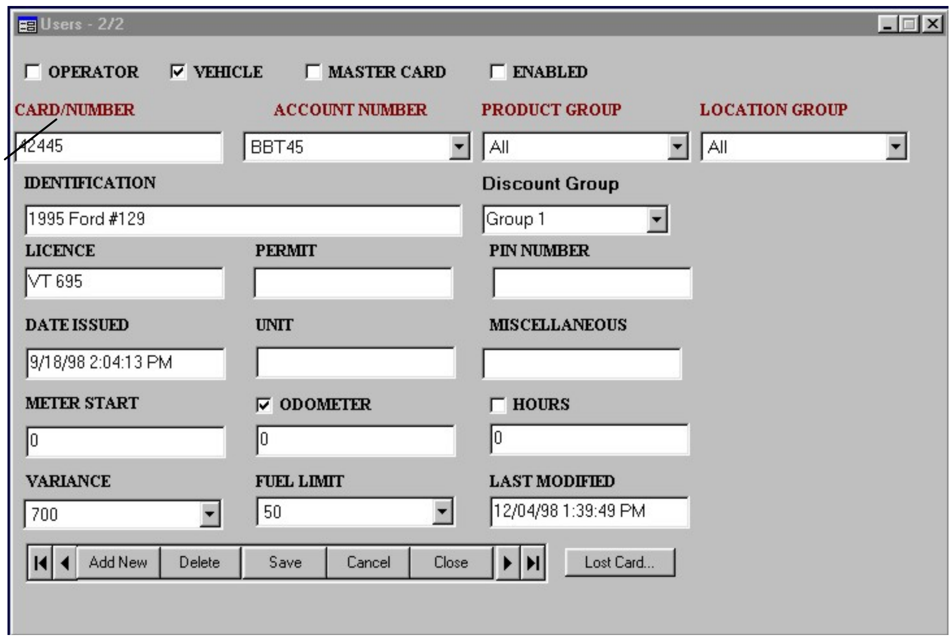
Find First searches from the top or the first record

Find Next searches from the current record position

User Database

The User database is used to record information about the users of the system. Each User of the system must have a record in the Users database. A User can be a Vehicle, an Operator (Customer), both a Vehicle and an Operator, or a Master card.

Key Field Titles are in Red (Card Number) Optional Fields in Black (Licence)



Screen 24 - User Setup

Adding a New User

Using the screen navigation buttons, select the 

button with your mouse. This will clear all the fields of their information so that you are able to enter in the new information. You can navigate in this screen by selecting the individual fields with your mouse cursor or by using your [TAB] key.

Please Note: Fields that are identified with a RED heading *must be* completed. e.g. in this screen, the **Number, Account Number, Product Group and Location Group** fields must be completed. All other fields are optional.

Select the box to indicate what the new user is. The choices are: ***Operator, Vehicle, and Master Card***. Next select the *Enabled* box if you wish to have the user authorized to fuel. De-selecting this box immediately the users privileges as soon as the Send Cards feature is activated.

Fill out the following User or Cardholder information fields as required:

Card / Number – enter the card number that will be assigned to a user. It is a required field

Account Number – enter the account number that any fuel taken by the user will be charged to. It is a required field.

Product Group – from the drop down menu, select the group of products that the user is authorized to purchase. The default is 'All'. It is a required field

Identification – this feature is used for reporting purposes

Location Group - the system defiles to 'All' however, any of the location groups previously entered into the system can be selected from the dropdown menu.

License – enter the license of the user

Permit – if a permit # is required, enter it here.

PIN Number – Some companies require a PIN # to be used in conjunction with the fueling card. If the user has a PIN, enter it here.

Date Issued – The system automatically defaults to the current date and time; however, a different date if required can be entered.

Unit – Enter a number or a description of the unit / vehicle

Miscellaneous – this field can be used for entering other information that can be reported.

Meter Start – When a vehicle is entered for the first time into the system, enter the starting odometer reading here.

Odometer – If the user keeps track of miles as opposed to hours operated, the system automatically fills in this field for vehicles that use the polling feature. The vehicle operator originally enters this information at the pump.

Hours - – If the user keeps track of hours as opposed to mileage, the system automatically fills in this field for vehicles that use the polling feature. The vehicle operator originally enters this information at the pump.

Variance – Enter the code here that indicates what the allowable mileage variance is for that particular unit. i.e. if the vehicle has a mileage variance setting of 300 km. and the user enters in a mileage figure where the difference in mileage between the previous reading and this entry is in excess of this number, the system will refuse to fuel. This setting is entered into the system in the *Limits and Variances* menu available in the *Main Tables* from the *Main Screen*.

Fuel Limit - Enter the code here that indicates what the allowable number of fueling units is for that particular unit. i.e. the maximum number of litres or gallons allowed per each fueling. This setting is entered into the system in the *Limits and Variances* menu available in the *Main Tables* from the *Main Screen*.

Last Modified – This date is automatically entered into the system every time that a change is made to the User Screen and the *Save* button is pressed.

Discount Group – Provided only in ProFuel Plus. See Chapter 4: ProFuel Plus-Invoicing and Setup.

Editing User Information

Locate the record that you wish to edit by using the navigation buttons to scroll through the database, or by using the search feature accessed through the Data Function menu. Using your mouse, select the field that you want to add information in or with your mouse highlight the data that you want to change. Type in the information, as you want it then select the Save button. The information has now been saved. This procedure can be done as many times as required.

Lost Card – Re-issuing

If a user has lost a card, locate the user record by using the navigation buttons to scroll through the database, or by using the search feature accessed through the Data Function menu. Select the Lost Card... button located on the lower right side of the User screen. The **Issue a New Card** screen will appear.

Screen 25 – Re-issue Lost Card screen

Enter the new number of the card that has been issued. Select the OK button to accept the new card number of select the Cancel button to cancel the transaction.

Deleting a User

Locate the record that you wish to delete and ensure that it is the record that is showing in the Account / Department screen. Once you are satisfied that this is the record that you wish to delete, select the Delete button. As soon as you select this button, a warning screen will appear asking you if this is the record that you wish to delete.

If the record you have selected is the correct record, then select the Yes button. If you do not wish to delete the record select the No button.

Locating a User

Specific records can be located using the screen navigation buttons located on the bottom of each database screen. Use CTRL+F or alternatively, records can be searched and specific records located using the advanced search features found in the Data Functions menu at the top of each screen.

Chapter 3 Daily Operations and Features

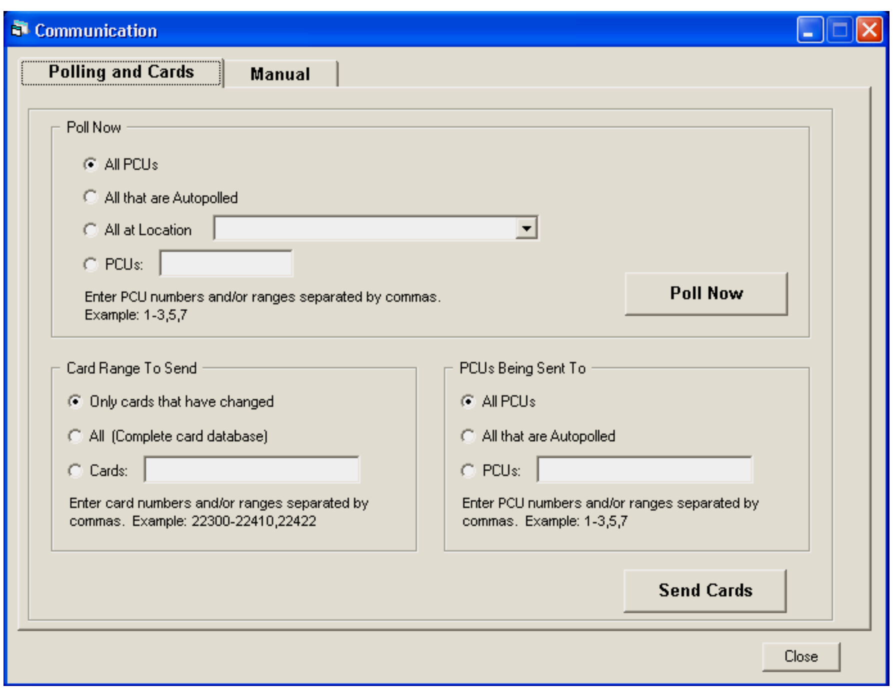
Communications

Communications with the Pump Control Units (PCU) is critical to the operation of a cardlock network. Communciations may be by a direct wire to the PCU, dial-up telephone modems, a network connection, wireless, cellular and various other methods.

Regardless of the technology used, Communications with the PCUs is necessary to collect the fuel trasactions created when cardholders use the PCU and also to maintain the list of which cardholders can use the PCUs. In ProFuel the Send Card feature automates the managemenet of the User Cards and Autopoll stream-lines the requirments for collecting the transaction data.

To access the **Communication** screen, select the 

button from the button menu at the top of your screen. It can alternatively be accessed by selecting the *Communication* option under the <Main Tables> menu located at the top left of your screen.



Screen 26 – Polling and Cards screen

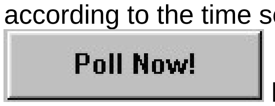
AutoPolling

The AutoPoll feature automates the steps in collecting the transaction data from the PCUs. Some setup is done in the PCU Setup screens referenced in a previous section of this manual. The Polling and Cards screen is used to initiate polling of individual or specific PCUs.

The Polling Options include:

All PCUs,
All PCUs that are Autopolled,
All PCUs at _____________Location,
PCUs – where you can type a PCU # or range of PCUs

When you have selected the PCUs that you want to poll, you can either let the system Autopoll according to the time schedule that you have previously set up or by selecting the



button, you can initiate a poll immediately.

Send Cards - Update Card Information in PCUs

The Polling and Cards screen is used send the current card authorizations to a single PCU, a selected group or all PCUs. The PCU uses this information to determine who has authority to pump fuel, what products and at what locations. In order to update the PCUs with the card information, complete the bottom part of the Polling and Cards screen. The two sections that need to be completed are:

Card Range to Send – with your mouse select the appropriate range of cards using the pre-selected options or enter the card numbers or range of numbers. Typically '**Card that have changed**' is used.

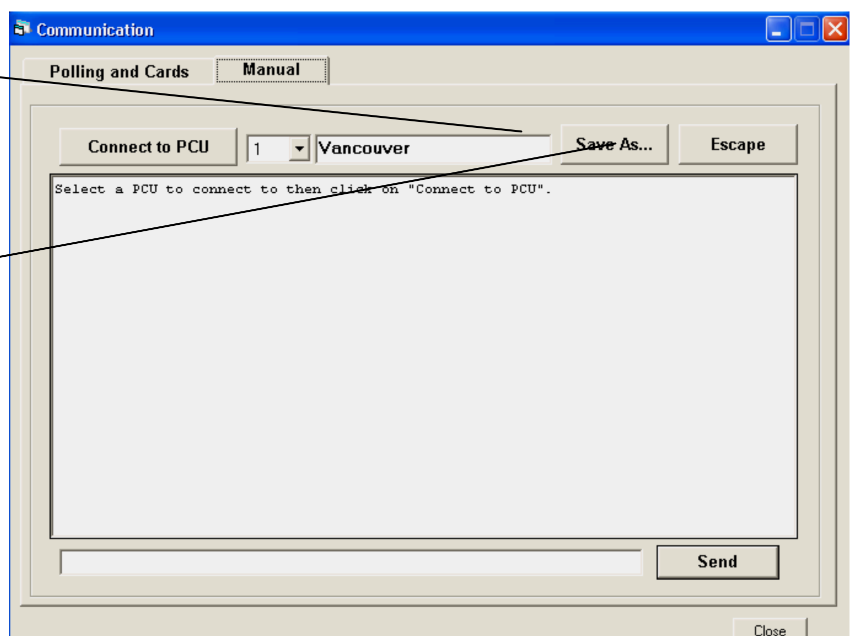
PCUs Being Sent to – with your mouse, select the appropriate range of PCUs that you want to send the updated card information to or enter the PCUs or range of PCUs.

Manual Communication

Select the <Manual> tab to get the Manual Communications screen will appear.

Escape allows you to abort a long listing such a LAC or LTA

SAVE AS. . button lets you save the PCU's conversation in a file. You are prompted for a filename. Cold Starts or PCU Configurations must be saved. Lists of Transactions should also be saved.



Screen 27 – Manual Polling screen

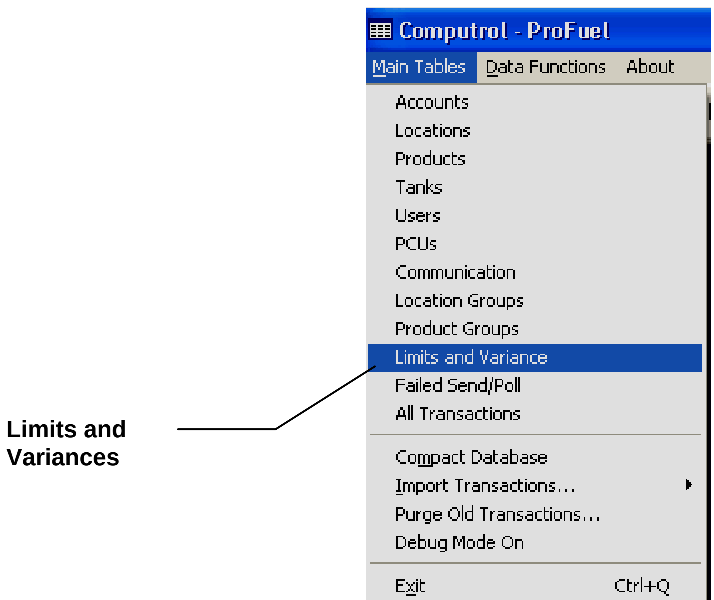
Manual communications use the PCU's commands directly. You can use this screen to enable cards, check the version, and configure your PCUs

To initiate a connection, select the PCU and click on 'Connect To'. This will dial up (if required) and connect you to the PCU. Type the commands into the thin text box (beside the Send button) and hit Enter or click Send. When you are finished communicating simply click the 'Disconnect from' button (which was the 'Connect to' button).

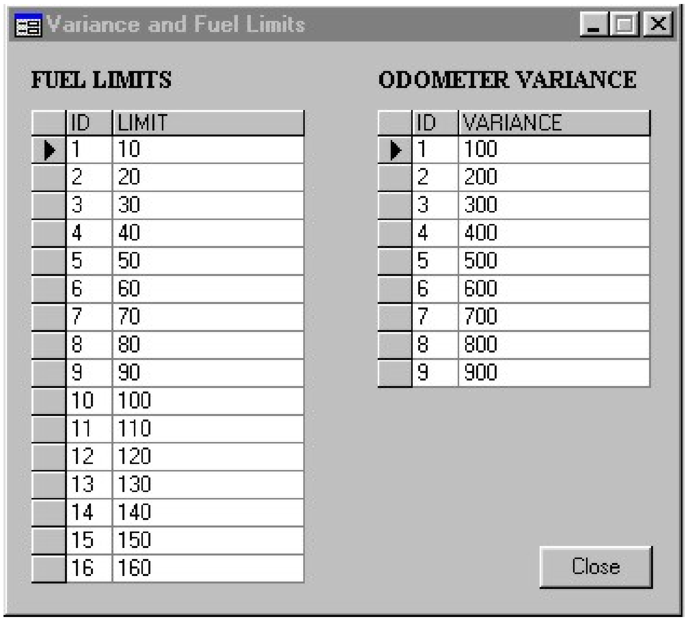
Limits and Variances

The Limits and Variances screen allows the ProFuel administrator to set up the maximum fuel limit per each fueling and to set the limit for the variance of odometer readings between each fueling. These settings add additional control over false odometer readings and unauthorized large fuel purchases.

To access the **Limits and Variances** screen, select the *Limits and Variances* option under the <Main Tables> menu located at the top of your screen.



Screen 28 – Main tables Drop-Down Menu



Screen 29 – Variance and Fuel Limits

<u>Fuel Limits</u>

This value restricts the maximum number of litres / gallons etc that can be accessed per each fueling. There are 16 different levels that can be applied. These levels are from 1 to 16. The value for each of these ranges is user configurable. To change the value, move your mouse cursor over the value you want to change, highlight the value and type in the new value.

<u>Odometer Variance</u>

This value is used to set the number of allowable kilometers / mile between each fueling. The purpose of this value is to ensure that the vehicle operator enters a valid odometer reading when fuel is taken. At time of fueling, if a valid reading is not entered an error message will be generated and fueling will not be allowed to take place. After 3 bad entry attempts fueling may be denied or allowed depending on the configuration of the PCU.

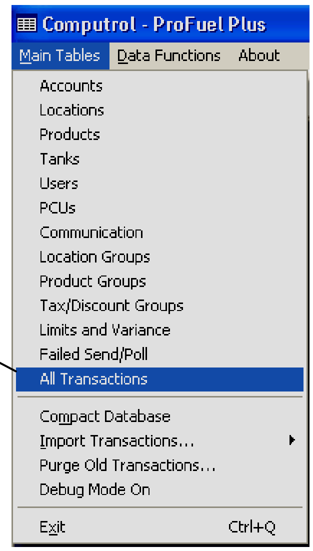
There are 9 different levels that can be applied. These levels are from 1 to 9. The value for each of these ranges is user configurable. To change the value, move your mouse cursor over the value you want to change, highlight the value and type in the new value.

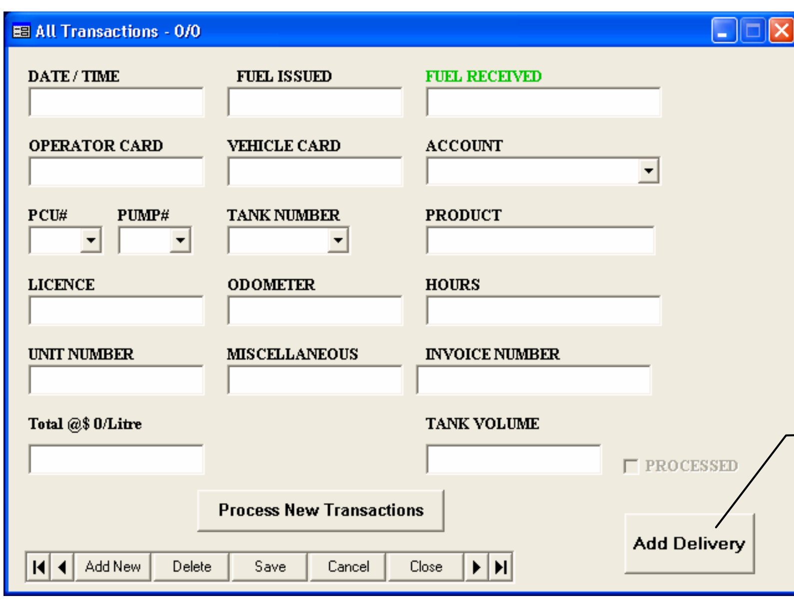
All Transactions

The All Transaction screen displays a log of all transactions in the database. Some fields are directly from the raw transaction (like date/time and pump number) and some are looked up values (like account, and tank), and others are calculated values e.g. total price and tank volume.

This screen is also used to manually input Fuel deliveries, or transactions that could not be processed automatically (rejected) and required editing. To access the **All Transactions** screen, select *All Transactions* option under the <Main Tables> menu located at the top of your screen.

All Transactions





Add Delivery Button to add fuel to tanks.

Screen 30 – All Transactions

Adding a New Transaction(s)

Using the screen navigation buttons, select the Add New button with your mouse. This will clear all the fields of their information so that you are able to enter in the new information. You can navigate in this screen by selecting the individual fields with your mouse cursor or by using your [TAB] key.

Rejected Transactions

Occasionally transactions will be rejected during a poll. These transactions may need to be included in the processed transactions database and must be corrected using the Modify Rejects Screen under the **All Transactions** drop-down menu. See Page 3-20 or see the Table of Contents, for more information.

Select the Process New Transactions button when you have finished entering all of the transactions. The databases will now be updated.

Editing Transaction Information

Locate the record that you wish to edit by using the navigation buttons to scroll through the database, or by using the search feature accessed through the Data Function menu. Using your mouse, select the field that you want to add information in or with your mouse highlight the data that you want to change. Type in the information, as you want it then select the Save button. The information has now been saved. This procedure can be done as many times as required.

Deleting a Transaction

Locate the record that you wish to delete and ensure that it is the record that is showing in the Account / Department screen. Once you are satisfied that this is the record that you wish to delete, select the Delete button. As soon as you select this button, a warning screen will appear asking you if this is the record that you wish to delete.

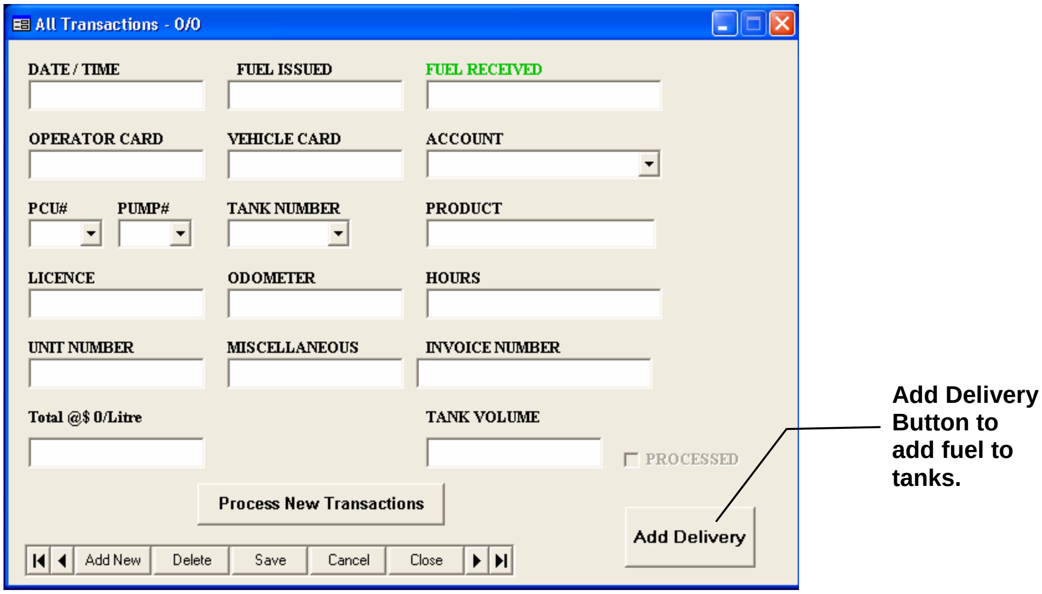
If the record you have selected is the correct record, then select the Yes button. If you do not wish to delete the record select the No button.

Locating a Transaction

Specific records can be located using the screen navigation buttons located on the bottom of each database screen. Alternatively, records can be searched and specific records located using the advanced search features found in the Data Functions menu at the top of each screen.

Add Delivery

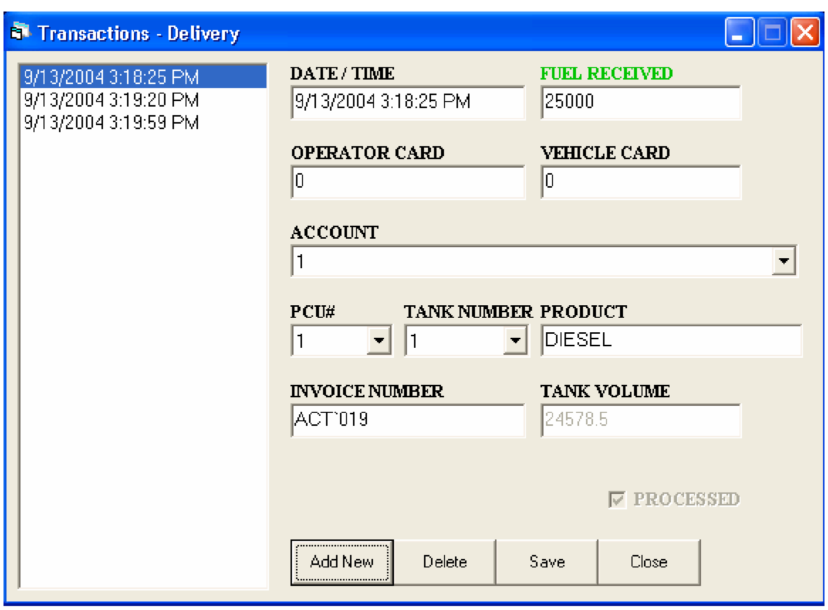
ProFuel's latest versions provide a quick and easy method of adding inventory to the tank database when your supplier delivers fuel.



Screen 31 – Add Delivery on All Transactions

The 

button on the All Transaction screen takes the user to a new screen that allows the entry of fuel volumes that have been added to the tank's inventory.



Screen 32– Tank Delivery Transaction Entry

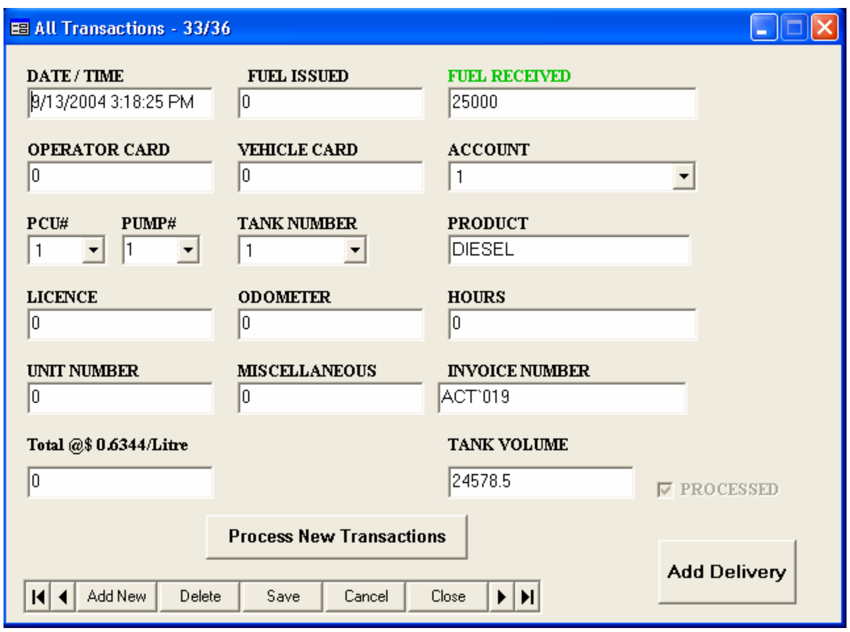
Tank Delivery Transaction Entry

The Screen will prompt the user to enter any number of fields as they require. It may be a policy for the organization that an Operator or Vehilce number be identified for these transactions or a Supplier's Invoice number may be required. ProFuel requires that following minimum fields for creation of the transaction.

- **Date and Time, this is the date and time of the delivery not the entry.**
- **PCU number,**
- **Tank Number and**
- **Fuel Received.**

Once the data is entered and visually checked the Save button commits the transaction to the All Transaction database where it will be held for further processing and reporting. The Tank balance will be updated immediately and all balances subsequent to the date you entered will be corrected.

To check the transaction for accuracy or for any other reason open the All Transactions database and search for one piece of criteria which uniquely identifies the transactionin question.



Screen 33- Tank Delivery Transaction in All Transactions

Record Navigation in the Transactions Database Records

At the bottom of the Locations database screen is the Navigation Bar shown below.

New records can be created by using a mouse to click the Add New button or by typing CTRL+A on the keyboard. The record's data fields will be blank.

The Delete button or the keystrokes CTRL+D will cause the selected record to be deleted. A confirmation box will appear and you must select Yes to delete or No if unsure. There is no undelete feature and deleting a 'current' record may cause extra work.

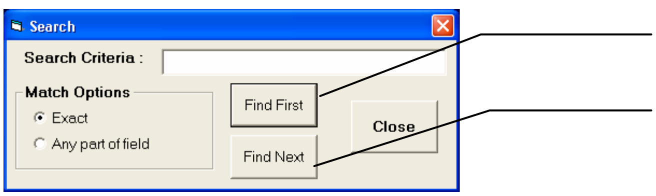
The Save button or the keystrokes CTRL+S will cause the record to be saved. This is regardless of whether changes have been made or not.

When the record has been changed BUT NOT SAVED, you may cancel the actions you have taken to modify the record by using the Cancel button or CTRL+U for Cancel Update. If the changes have been saved you can not undo them but you type changes and Save them.

If you have finished or wish to complete some other task you can Close the current screen with a mouse click on the Close button. There are no keyboard shortcuts for Close.

Search Window

- Place the cursor on the field to be searched
- Press Ctrl + F on the keyboard to bring up the 'Search Window'
- Enter the data to be searched for
- Click <Find First> or <Find Next> to display a matching record.

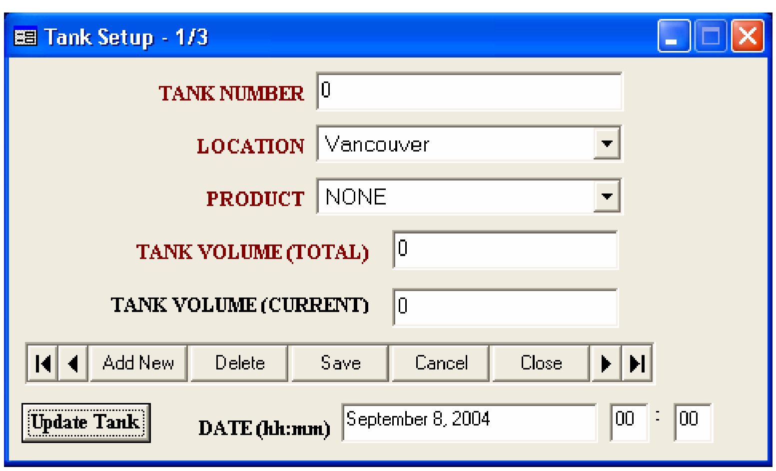


Find First searches from the top or the first record

Find Next searches from the current record position

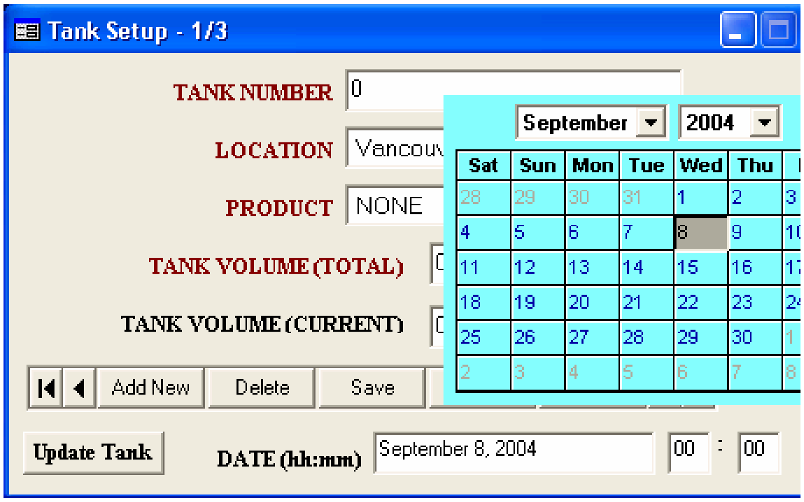
Entering or Adjusting the Tank's Current Volume

Update Tank provides the ability to make adjustments to the tank inventory directly from the Tank Database screen. Once the tank setup has been completed and saved, click on the button to see additional fields for entry of the date and time the last measurement was taken.



Screen 34 – Adjusting Tank Volume

A calendar will appear when a mouse double-clicks in the date information box. If the mouse hovers over that box (where September 8,2004 appears above) the system will provide the navigational hint.



Screen 35 – Adjusting Tank Volume Calendar

Steps to Enter or Adjust the Tank's Current Volume

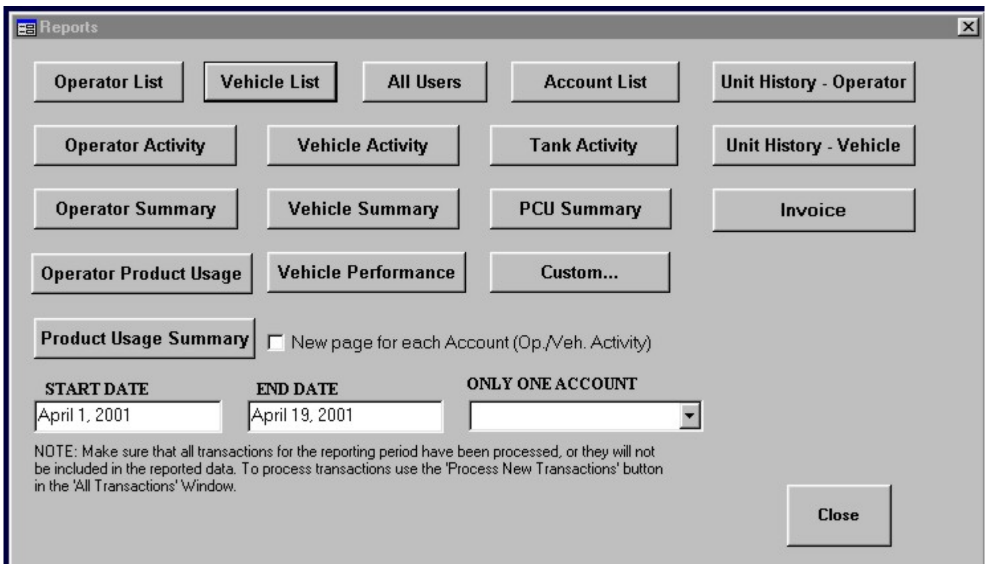
- Select the day of the tank dip or measurement and the calendar will disappear.
- Enter the time of the Dip or Measurement in 24-hour format.
- Enter the measured volume in the Tank Volume (Current) box overwriting the number that was there and ProFuel will adjust all inventory values accordingly to justify to this point.
- Use the Save button to record the changes.

Reports

ProFuel includes a set of comprehensive reports that provide the manager or user an accurate accounting of the transactions in their system. The reports also include listing of vehicles, users etc. Upon request, special reports can be created if required.

To access the Report menu, select the 

button from the button menu at the top of your screen. It can alternatively be accessed by selecting the *Report* option under the <Main Tables> menu also located at the top of your screen.



Screen 36 - Reports

Creating Reports

Creating reports in ProFuel involves 3 very simple steps:

Step 1 – Set the reporting period. The reporting period can be set using the **START DATE** and **END DATE** fields. The period is up to and including the end date. As an example, the screen above shows a reporting period for the period April 1, 2001 to April 19, 2001.

Step 2 – If the report applies to only one account, select the account from the drop down menu in the **Only One Account** field.

Step 3 – select the appropriate button for the desired report.

See the **Appendix** for sample reports

Report Outlines

Listings – Operator List, Vehicle List, All Users and Account List

Listings are data straight from the database. Users can be listed separately as Vehicles, Operators or as a complete list of All Users in the database. The list is grouped by account and sorted by number. Accounts may also be listed. Account lists show information such as phone number, address, and contact information.

Activity Logs – Operator Activity, Vehicle Activity, Tank Activity

The Operator and Vehicle Activity reports give a detailed, transaction by transaction listing for each user in an account. The transactions are sorted chronologically. The totals for each user and for the account are also calculated. The Tank Activity report provides day & period summaries of fuel issued and received. The period end tank balance is also displayed.

Unit History – Operator, Vehicle

The Unit History – Operator and the Unit History – Vehicle reports prompt the operator for the specific Unit # and then will detail all transactions related to the fuel consumption and usage of that vehicle by a particular operator or driver.

Summary Reports – Active PCU Summary, Operator, Vehicle and Product Usage

Active PCU Summary reports the fuel output by each Active PCU in the database. The report is grouped by pump. This report does not list PCUs or pumps that had no activity for the period.

Operator and Vehicle Summary reports summarize all transactions sorted either by individual operator or individual vehicle number.

Product Usage Summary report breaks out by Account Number and Department the litres and costs of the fuel products used.

Vehicle Performance

The Vehicle Performance report calculates by vehicle the fuel used for the specified period. It also calculates the average litres/kilometres used for that period as well as total and average for the lifetime of the vehicle.

Custom Reports

ProFuel provides the facility to have custom reports created and recalled as required. This facility directs the system to the location of the custom reports so that they can be run.

Databases, Logs and Archives

Database Tools

The two database tools **Compact Database** and **Repair Database** are accessed through the <Main Tables> menu located at the top of the screen.

Compact Database - Over time databases can become bloated and inefficient. This happens because when records are deleted, 'holes' are left in the database. To remove the holes and improve database efficiency (and reduce hard disk usage) you should periodically (once a month or more) Compact the database. All screens must be closed when you issue this command.

Repair Database - Sometimes database corruption is unavoidable (lightning, power failures, disk errors, etc.). It is sometimes possible to repair errors in the database using the **Repair Database** command. You can try this command if you are experiencing odd behavior in the program (data disappears or appears garbled, etc.).

Database Backup - A better and more reliable solution for database corruption is to keep a regular backup of the database file (called 'main.mdb' in the **ProFuel** directory). This can be a backup to tape, floppy, or an off site backup service. Backups should be done regularly (nightly or weekly). The raw transaction archive ('archive.zip') should also be backed up.

Purge Old Transactions - Transaction data (in a processed form) is also stored in the database. Over long periods of time (or high volume of transactions) this can cause the database to grow very large, negatively impacting performance. It is possible (and recommended) to occasionally purge the database of transactions that will no longer be used. Unused transactions may include old data that has already been processed and reported on. This could be done yearly, quarterly or even monthly. Using the **Purge Old Transactions** command you will be prompted to enter a date and all transactions before that date will be removed from the database (but not from the archive). Keeping the database as small as possible improves performance and reduces memory usage.

Transaction Archive

Raw transactions are archived when the poll is successful. They are stored in the file 'archive.zip' in the **ProFuel** directory (C:\Program Files\ProFuel by default). The transactions are named like '199809020103.4'. Which means that this file is the transaction log from, PCU number 4 on September 2, 1998 at 1:03 AM (YYYYMMDDHHmm.PCU - Year, Month, Day, Hour, minute, PCU)

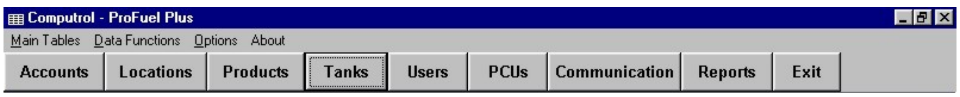
We have bundled the 'Zip' and 'Unzip' command line programs for accessing the archive.

System Operations

Download Cards/Numbers to PCU

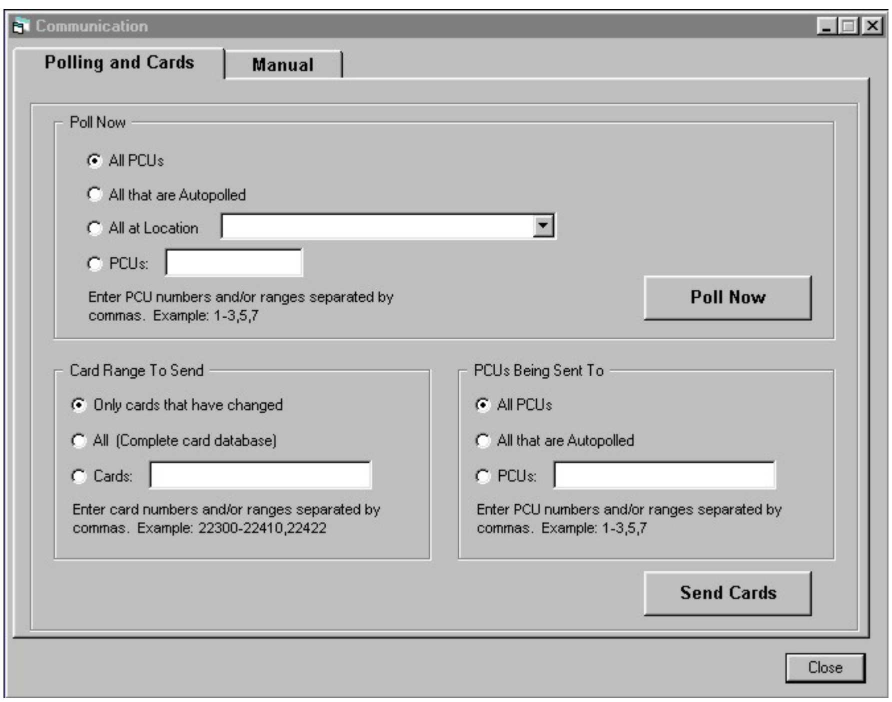
Cards, Vehicle Numbers or Employee Numbers in your ProFuel database can be downloaded, either individually or in batches, to your Pump Control Units (PCUs). This feature provides for easy broadcast of cards/numbers when setting up new PCUs or when restoring tables after a service ‘Cold Start’.

To download card/numbers to PCUs, go to the Polling and Cards Screen that is reached by selecting the <Communication> button on the Main Menu bar



Selecting the 

button will cause the Communication screen to appear.



Screen 37 – Polling and Cards Screen

Download Cards

To download card/numbers to the PCU

Select the appropriate Card Range Button that is found in the 'Card Range To Send' section of the window.

Select the target PCU button that is found in the 'PCUs Being Sent To' section of the window.

Click on the 

button

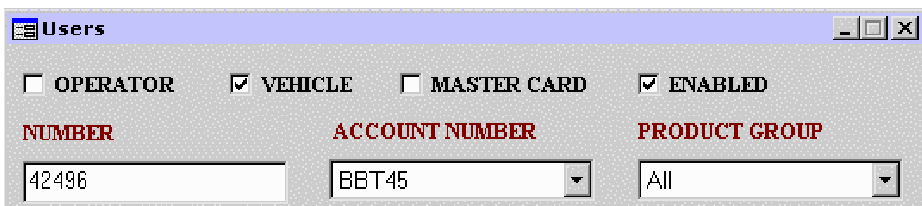
Advanced Information

The download procedure takes place in 2 separate stages.

ProFuel disables the card/numbers that you have specified when you selected the Card Range Button. If you specify 'Only cards that have changes' or specific card numbers, then only those cards specified will be disabled individually. If you specify 'All' then ProFuel disables all cards with one command.

ProFuel Enables or Authorizes the card/numbers that you have specified.

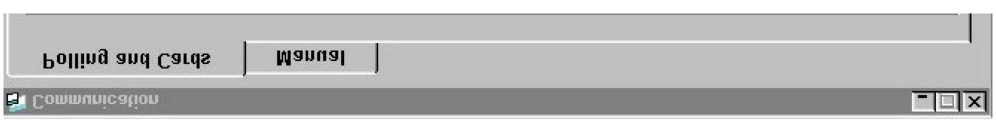
Please Note: Please remember the card/numbers downloaded are controlled by the state of the 'Enabled' box at the top of each User record. If the box is checked, then the card/numbers in that record will be Enabled/Authorized. If the Enabled box is not checked, then the card/number will be Disabled.



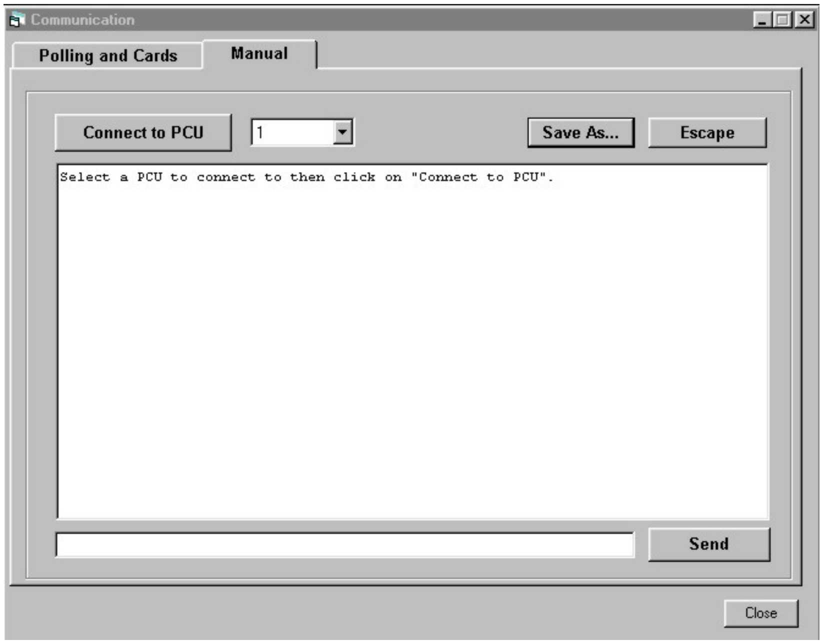
Screen 38 – Authorization Data Requirements

Manual Authorization of Cards

Users that prefer to Enable/Authorize cards manually can achieve this by connecting to the PCU through the Manual Tab in the Communications screen.



This will cause the Manual Communications screen to appear.



Screen 39 – Manual PCU Communication Screen

Select the PCU you want to connect to then write in the card/numbers that you want to Enable/Disable.

Fleet model PCUs recognize the EC/DC (Enable/Disable) command set while most C600 models recognize the AN/DN (Authorize Number/Deauthorize Number) sequence.

<u>Card Downloading Problems</u>

If communication between ProFuel and any one of the PCUs is interrupted during the download process, it is possible that the cards/numbers that were disabled during the first stage of the process may not have all been Enabled or Disabled before the communication failure.

To verify the status of the cards/numbers, connect manually to the PCU and issue the appropriate command. E.g. LAP, LSN, LAV. The PCU will then echo its card tables to your screen.

Collecting Transactions from PCUs

Polling the PCUs (Pump Control Units) is the process where ProFuel or ProFuel Plus contacts each PCU and downloads information about the transactions that have transpired since the last time that they were polled. This process can either be initiated automatically or manually. Information that is gathered includes:

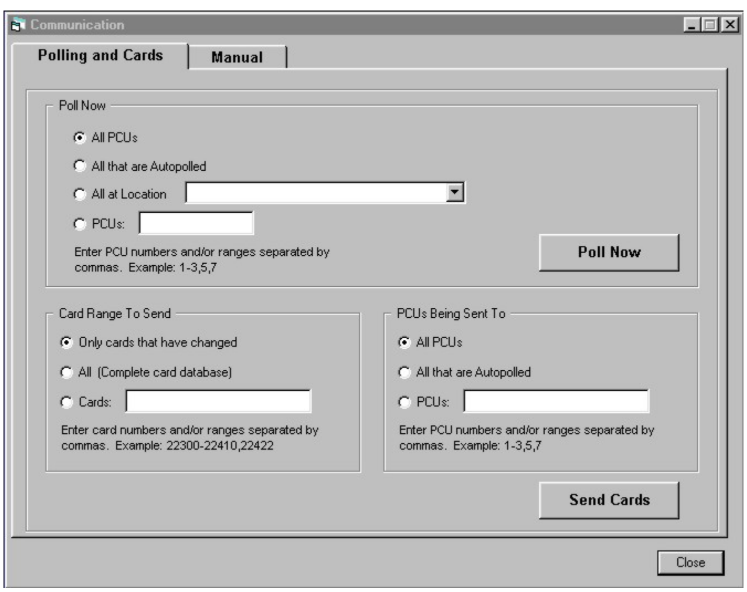
- **Location of PCU**
- **Products that were pumped**
- **Number of gallons or other units of measure pumped**
- **Card # / Unit # that used the product pumped**
- **Date and time of transaction**
- **Mileage of unit (if entered)**

Automatic Polling

The Communication screens are used to initiate the Autopolling feature of **ProFuel** and **ProFuel Plus** as well as initiating Manual polling of one or all PCU's. This screen also allows you to send updated card information as described in the previous section of this manual.

To access the **Communication** screen, select the 

button from the button menu at the top of your screen. It can alternatively be accessed by selecting the *Communication* option under the <Main Tables> menu also located at the top of your screen.



Screen 40 – Polling and Cards screen

AutoPoll - Configuring

The AutoPoll feature is setup in the PCU Setup screens detailed in the *PCU Setup* section of this manual and referenced in this section. The Polling and Cards screen is used to initiate polling of individual or specific PCUs.

With your mouse, select the option that is appropriate for the PCUs that you want to have Autopolled. These options are:

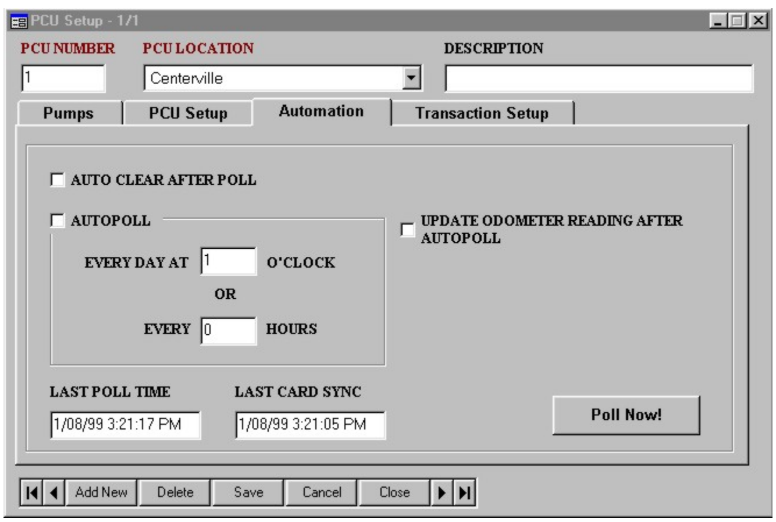
- **All PCUs**
- **All PCUs that are Autopolled**
- **All PCUs at _____________ Location**
- **PCUs – (you can select an individual PCU to poll)**

When you have selected the PCUs that you want to poll, you can either let the system Autopoll according to the time schedule that you have previously set up or by selecting the 

button, you can initiate a poll immediately.

Setting Up Autopoll / Manual Polling

To access the screen that allows you to enter the parameters for the setup of Autopolling and manual polling as related to a specific PCU, select the <Automation>> tab on the PCU Setup screen. This will cause the Automation screen to appear.



Screen 41 – Automatic Polling setup screen

The *Automatic* section of the PCU Setup screen is used to setup the time and frequency for automated (scheduled) polling. By default scheduled polling is disabled. The daily poll time is the hour (in 24 hour format) to begin polling that PCU.

You may alternatively set the *'EVERY ... HOURS'* to make sure the PCU never goes more than that many hours without being polled.

The *LAST POLL* time is also displayed in the window.

Select the '*Update Odometer Reading After Autopoll*' box if you wish to have the odometer updated in the system after every fill.

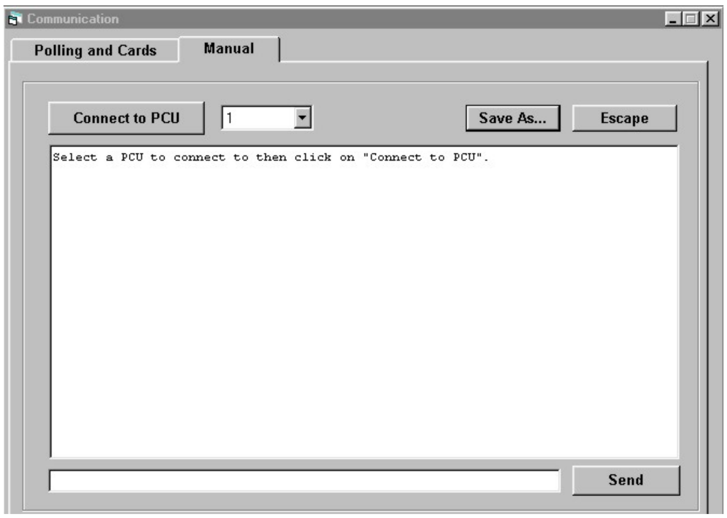
To poll a particular PCU right away, you can just click the 

button. You may also select to poll 'All', 'All that are Autopolled', or All at a particular location.

With the **AUTOPOLL** option enabled, the system can operate totally unattended. In order for the automated polling to work, the computer must be on and have the program running.

Manual Polling

In order to access the screen that allows you to initiate manual polling of the PCUs, select the <Manual> tab on the Communication screen. The Manual screen will appear.



Screen 42– Manual Polling screen

Manual communication can be used to issue commands directly to a PCU (like through a terminal). To initiate a connection, select the PCU to connect to and click on 'Connect To'. This will dial up (if required) and log you in to the PCU. To issue a command, type it into the thin text box (beside the Send button) and hit Enter or click Send. You can save a transaction to a file if you wish by clicking the 'Save Transaction As...' button, you will be prompted for a file name.

When you are finished communicating simply click the 'Disconnect from' button (which was the 'Connect to' button).

The Escape button can be used to cancel a long transfer (like from an 'L T A' command).

You can use this screen to enable cards, check the version, and configure your PCUs.

AutoPoll Transactions

When the 

button has been selected, a polling log screen will appear. This will show the progress as ProFuel connects to, gathers transactions from and clear each PCU in turn. When the Autopoll has completed its process the polling log will remain on screen to confirm fro you that the poll was successful.

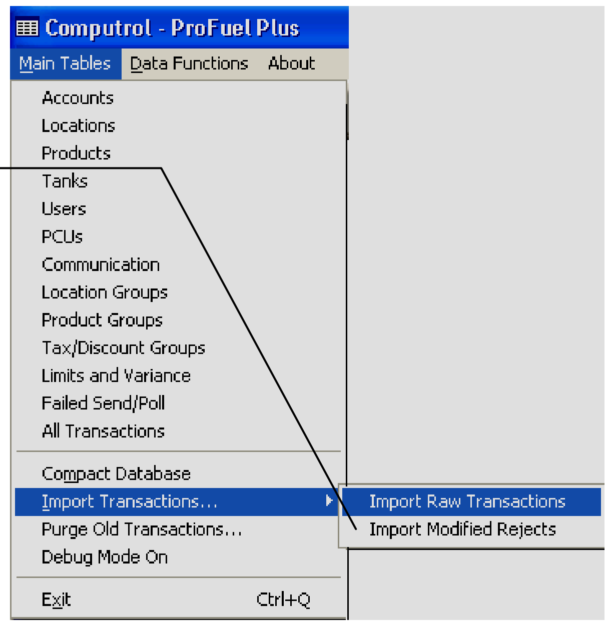
Processed Transactions

Transactions which meet all of the data requirements and match the master files you have entered in the ProFuel Database will be merged into the **All Transactions** database which can be view, edited a=or processed further in preparation for reports or invoicing.

Rejected Transactions

Any transaction line received from the PCU that can not be processed further using the data already entered will be stored in the **Rejected Transaction Table.** This file must can be viewed and edited to ensure there is not unaccountable fuel.

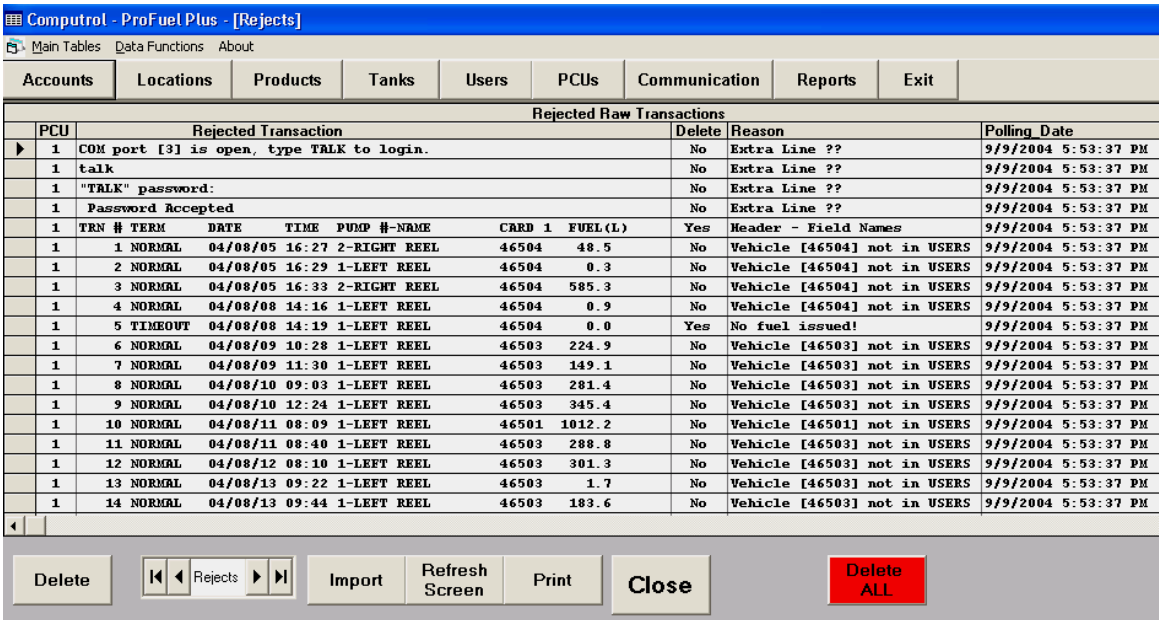
Display the Table of Rejected Transactions by clicking on *Main Tables* *Import Transactions* and select *Import Modified Rejects*



Screen 43- Opening Rejected Transaction Table

The table displays all of the transaction records it has failed to process into the All Transactions Table. The 4th column from the left states the reason why each record could not be imported into the All Transaction database. Some of the records are not transactions at all but empty lines or header lines brought in as part of the raw transaction data format the PCU issues.

Editing and Merging Reject Transactions



PCU	Rejected Transaction	Delete	Reason	Polling_Date
1	COM port [3] is open, type TALK to login.	No	Extra Line ??	9/9/2004 5:53:37 PM
1	talk	No	Extra Line ??	9/9/2004 5:53:37 PM
1	"TALK" password:	No	Extra Line ??	9/9/2004 5:53:37 PM
1	Password Accepted	No	Extra Line ??	9/9/2004 5:53:37 PM
1	TRN # TERM DATE TIME PUMP #-NAME CARD 1 FUEL(L)	Yes	Header - Field Names	9/9/2004 5:53:37 PM
1	1 NORMAL 04/08/05 16:27 2-RIGHT REEL 46504 48.5	No	Vehicle [46504] not in USERS	9/9/2004 5:53:37 PM
1	2 NORMAL 04/08/05 16:29 1-LEFT REEL 46504 0.3	No	Vehicle [46504] not in USERS	9/9/2004 5:53:37 PM
1	3 NORMAL 04/08/05 16:33 2-RIGHT REEL 46504 585.3	No	Vehicle [46504] not in USERS	9/9/2004 5:53:37 PM
1	4 NORMAL 04/08/08 14:16 1-LEFT REEL 46504 0.9	No	Vehicle [46504] not in USERS	9/9/2004 5:53:37 PM
1	5 TIMEOUT 04/08/08 14:19 1-LEFT REEL 46504 0.0	Yes	No fuel issued!	9/9/2004 5:53:37 PM
1	6 NORMAL 04/08/09 10:28 1-LEFT REEL 46503 224.9	No	Vehicle [46503] not in USERS	9/9/2004 5:53:37 PM
1	7 NORMAL 04/08/09 11:30 1-LEFT REEL 46503 149.1	No	Vehicle [46503] not in USERS	9/9/2004 5:53:37 PM
1	8 NORMAL 04/08/10 09:03 1-LEFT REEL 46503 281.4	No	Vehicle [46503] not in USERS	9/9/2004 5:53:37 PM
1	9 NORMAL 04/08/10 12:24 1-LEFT REEL 46503 345.4	No	Vehicle [46503] not in USERS	9/9/2004 5:53:37 PM
1	10 NORMAL 04/08/11 08:09 1-LEFT REEL 46501 1012.2	No	Vehicle [46501] not in USERS	9/9/2004 5:53:37 PM
1	11 NORMAL 04/08/11 08:40 1-LEFT REEL 46503 288.8	No	Vehicle [46503] not in USERS	9/9/2004 5:53:37 PM
1	12 NORMAL 04/08/12 08:10 1-LEFT REEL 46503 301.3	No	Vehicle [46503] not in USERS	9/9/2004 5:53:37 PM
1	13 NORMAL 04/08/13 09:22 1-LEFT REEL 46503 1.7	No	Vehicle [46503] not in USERS	9/9/2004 5:53:37 PM
1	14 NORMAL 04/08/13 09:44 1-LEFT REEL 46503 183.6	No	Vehicle [46503] not in USERS	9/9/2004 5:53:37 PM

Screen 44 - Rejected Transaction Table

Most of the transactions will be rejected for very clear reasons such as:

- Duplicate Transaction (it has been processed already)
- Vehicle (nnnnnn) not it USERS database
- Operator (nnnnn) not in USERS database
- Zero Fuel (where there was no fuel counted or dispensed).

It is the responsibility the system manager to empty this list by:

1st. Create the proper User, Account, Pump, PCU needed to satisfy the error message
2nd confirm that no transaction remain which contain valid fuel information.
3rd Clear the remaining transaction records out of the reject file.

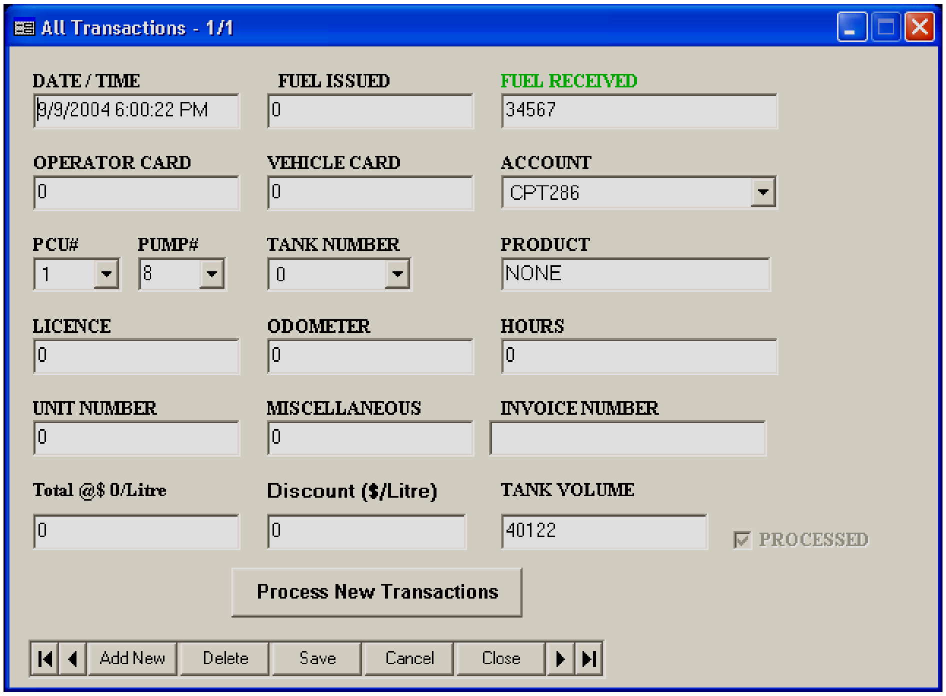
The 

button on the Reject screen is used to re-try to merge the rejects. As the required records are added to the database files there will be fewer and fewer transaction records inside. If there are no transactions with fuel left in the Rejected Transaction Table it is safe to clear it using the Delete All. The button is red for a good reason; there is no undelete only re-importing from raw data files.

If there are several Zero Volume transactions terminated by Timeout and they seem to be sequential it may be that a problem exists with the Pump in question.

Processing All Transactions

Once all rejected transactions have been cleared up the All Transactions table will show the individual data in each transaction as it is about to be processed. At any time you wish to report on data in the system you must process all of the new transactions to ensure that the report information is up-to-date and accurate.



Screen 45 - All Transactions Table

Use the 

button at the bottom of the screen to process any transaction data that has been merged after a poll or imported form the rejects file since the last transaction processing was done.

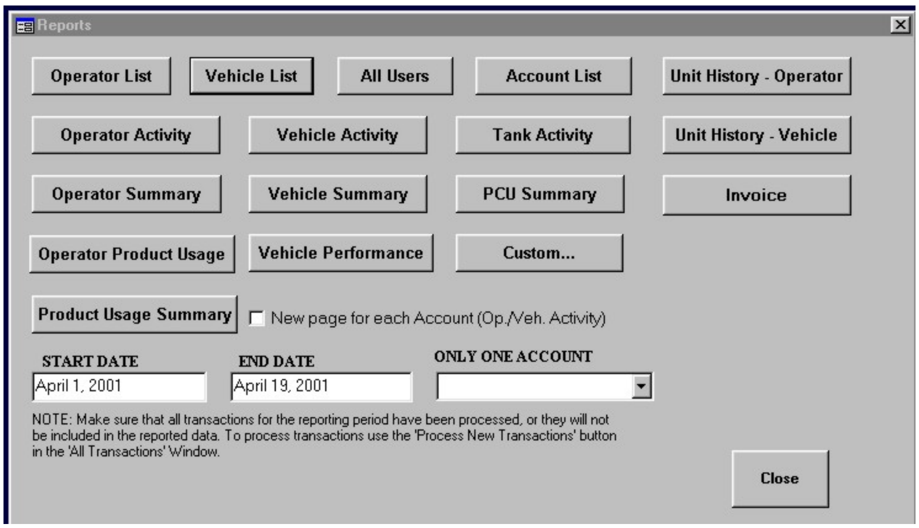
Processing transactions ensures that accurate pricing, account information, discounts and taxes are applied to the transaction before any reporting is done on the period in question.

If all transaction data has been processed then Reports can be created.

Creating Reports

To access the Report menu, select the 

button from the button menu at the top of your screen. It can alternatively be accessed by selecting the *Report* option under the <Main Tables> menu also located at the top of your screen.



Screen 46 - Reports

<u>Creating Reports</u>

Creating reports in ProFuel and ProFuel Plus involves 3 very simple steps:

Step 1 – Set the reporting period. The reporting period can be set using the **START DATE** and **END DATE** fields. The period is up to and including the end date. As an example, the screen above shows a reporting period from April 1, 2001 to April 19, 2001.

Step 2 – If the report applies to only one account, select the account from the drop down menu in the **Only One Account** field.

Step 3 – select the appropriate button for the desired report. The report will then be run and can be directed to your screen, a file or to a printer.

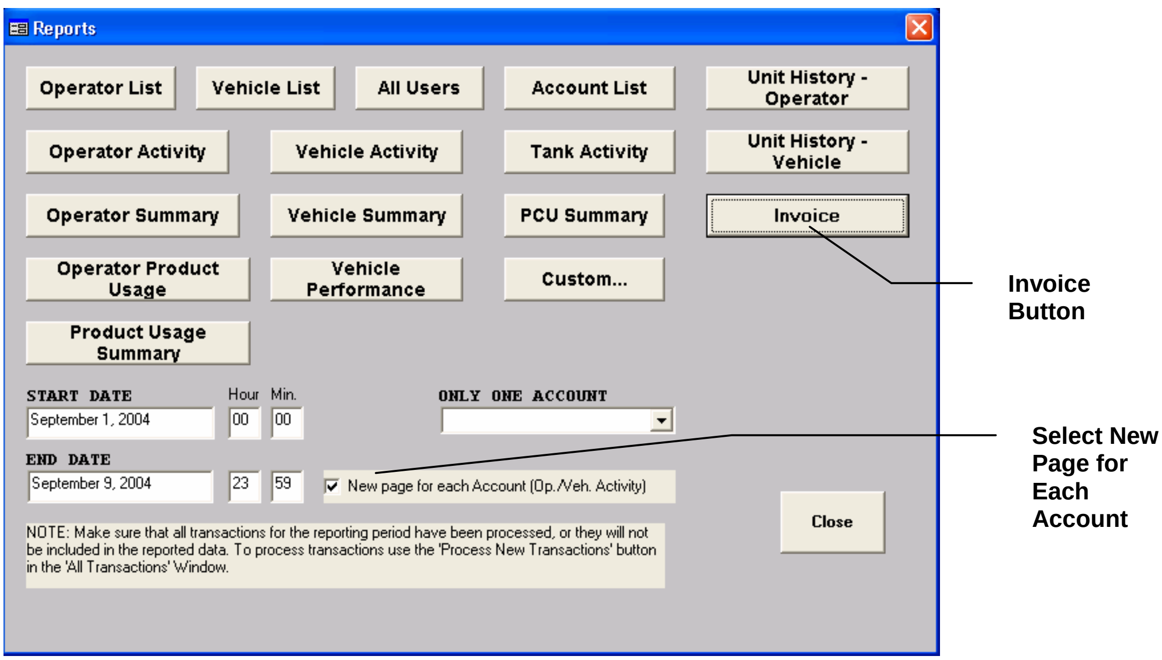
Chapter 4 : ProFuel Plus Invoicing and Setup

Invoices (ProFuel Plus Only)

Computrol has modified ProFuel by adding a powerful new Discounts and Taxes module to the billing program known as **ProFuel Plus.** This module provides the ability to charge discounts and taxes to each fuel transaction and to generate complete Billing Statements by Account.

The ProFuel Plus Reports screen has an additional button for generating invoices for your Accounts. You are directed to choose which Account or all Accounts and whether to show all transaction details on your invoices, or provide summarized totals only. To open the Report menu, select the

button from the main menu at the top of your screen.

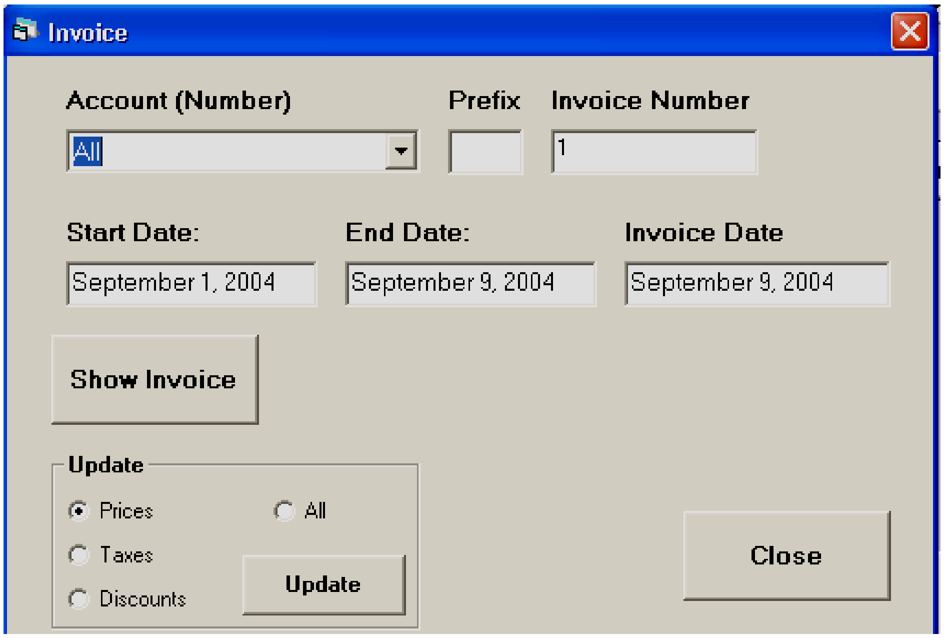


Screen 47- Report Screen

Creating Invoices / Billings

Billings (Invoices) can be created after all the pumps have been polled and the transactions have been processed. See *Chapter 3: Daily Operations and Reports* for information on how this is completed. Billings can be processed for any single account or all Accounts for any date period you specify. All reports, including Invoices are run from the Reports screen. To create a Billing report, select the <Invoice> button from the Report screen.

Please Note*:* If you wish the report to have separate pages for each Account, you must go back to the Reports screen and select the 'New Page For Each Account' box.



Screen 48 – Invoice Screen

Enter in the information in the boxes provided to create your report.

Account Number – The default is all – if the report is for a specific account, then select the account number / name from the drop-down box.

Prefix – Enter any prefix you wish to have in front of the Invoice number – if applicable

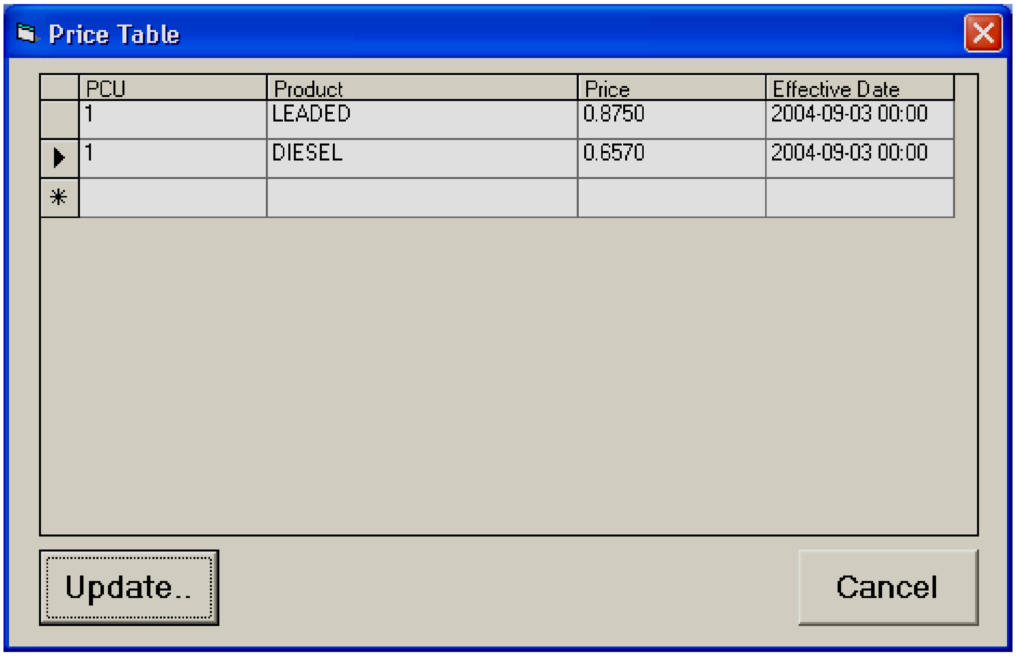
Invoice Number – Enter the number you wish to appear on the first invoice you are about to will create. Subsequent Invoices will be numbered sequentially unless manually changed. You may choose to enter the next number after those used in the previous invoicing session.

Start Date – This is the data of the earliest data you wish to include in the report. The data will include transactions after the time 00:00:01 hours on the date you select.

End Date – This is the date of the latest data you wish to include in the report. The data will include transactions up to 23:59:00 hours on the date you select.

Invoice Date – This is the date of the Invoice creation and will print on the invoice reports. If you are selecting only one invoice for this report, enter the date for that invoice.

Update – Discounts, taxes and prices may have changed since the transaction data was processed. At this time you may wish to review the Taxes and Discounts which have been applied by opening the Taxes and Discounts screen under *Main Tables.* Prices change much more frequently so an additional screen has been developed. Click Update Prices or ALL and you will be able to enter price changes for each product at each PCU and specify an effective date.



Screen 49 - Price Update

The Prices Update screen allows you to enter any number of price changes without visiting each of the PCU setup screens.

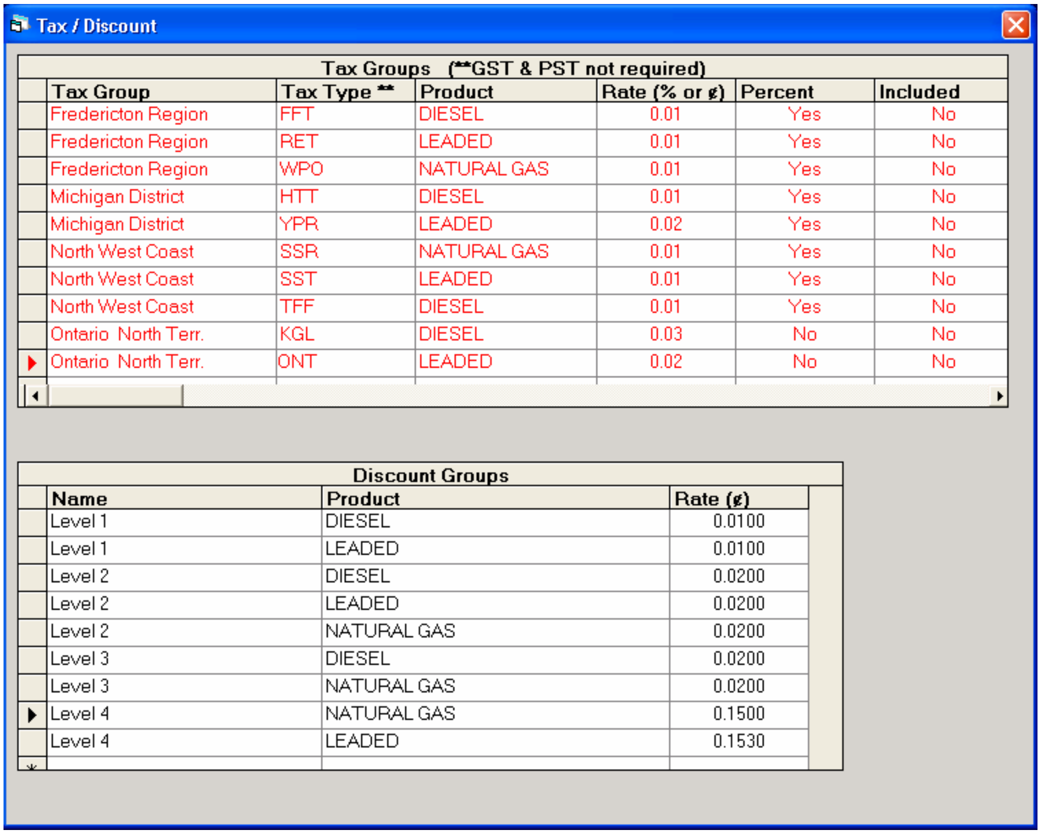
- Click in the PCU box and select the proper PCU from the drop-down list
- Click in the Product box and select the proper Product from the drop-down list.
- Enter the new price for the fuel selected.
- Enter the effective date for that new price. Only transactions after the effective date will be changed. Double-clicking on the Effective Date box will cause a calendar to appear. Select the proper day from the calendar and then edit the time if necessary.
- Click on the Update button and confirm that you wish Update to proceed.

The Invoice Screen will be presented again and you can use the Show Invoice button to continue. Once you have checked the invoices they can be printed or export to other systems, as you require.

Setup Required for Invoicing

ProFuel Plus provides the ability to apply Taxes and Discounts to the price of the products sold through the Computrol PCUs in your network. **Taxes** are setup in the Tax/Discount screen accessed only using the *Main Tables* button then *Tax/Discounts.*

Discounts allow you to offer specific customers a price that is lower than the advertised price. A customer may have more than one account and different discounts may apply to each. Many different levels of discount can be used and the discount applied is in pennies of each unit sold. Note that the Accounts screen from ProFuel Plus includes a field in which to specify the Account's Discount Group. This is not present in the standard ProFuel Version where discounts are not provided.



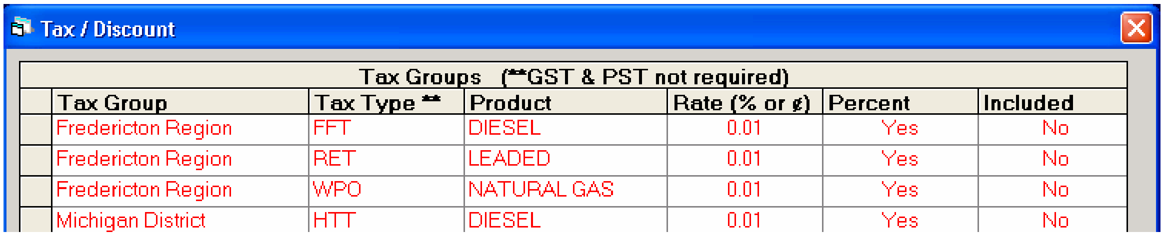
Tax Group	Tax Type **	Product	Rate (% or ¢)	Percent	Included
Fredericton Region	FFT	DIESEL	0.01	Yes	No
Fredericton Region	RET	LEADED	0.01	Yes	No
Fredericton Region	WPO	NATURAL GAS	0.01	Yes	No
Michigan District	HTT	DIESEL	0.01	Yes	No
Michigan District	YPR	LEADED	0.02	Yes	No
North West Coast	SSR	NATURAL GAS	0.01	Yes	No
North West Coast	SST	LEADED	0.01	Yes	No
North West Coast	TFF	DIESEL	0.01	Yes	No
Ontario North Terr.	KGL	DIESEL	0.03	No	No
Ontario North Terr.	ONT	LEADED	0.02	No	No

Name	Product	Rate (¢)
Level 1	DIESEL	0.0100
Level 1	LEADED	0.0100
Level 2	DIESEL	0.0200
Level 2	LEADED	0.0200
Level 2	NATURAL GAS	0.0200
Level 3	DIESEL	0.0200
Level 3	NATURAL GAS	0.0200
Level 4	NATURAL GAS	0.1500
Level 4	LEADED	0.1530

Screen 50 - Tax / Discount Setup Menu

Tax Group Setup

ProFuel provides the Tax Group setup screen in which you can create groups of taxes to apply to the fuel you sell. The Group may have any number of taxes included but they are grouped to reflect the way they apply to products sold in a specific tax region. Since the taxes are applied to the product as it comes from the pump, the same product may have different taxes applied in each different location you sell it.



Tax / Discount

Tax Groups (**GST & PST not required)

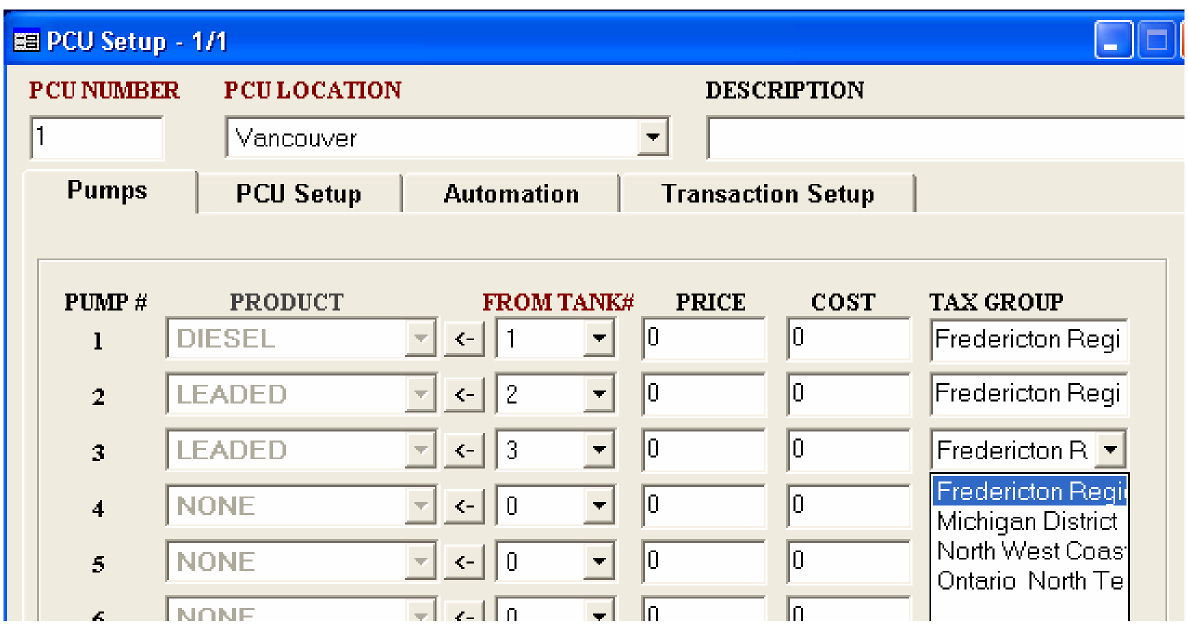
Tax Group	Tax Type **	Product	Rate (% or ¢)	Percent	Included
Fredericton Region	FFT	DIESEL	0.01	Yes	No
Fredericton Region	RET	LEADED	0.01	Yes	No
Fredericton Region	WPO	NATURAL GAS	0.01	Yes	No
Michigan District	HTT	DIESEL	0.01	Yes	No

Screen 45 - Tax Group Screen

In the Tax Group example above, taxes for the Fredericton Region have been Grouped in a Tax Group of the same name. The Group contains:

- 3 different tax types FFT, RET and WPO taxes
- To be applied to 3 different products when sold in the area.
- The example shows the tax rate for all 3 is the same 0.01
- Yes it is a percentage of the price, not 0.01 cents per unit of measure (gallon, litre or Kg).
- No in the last column indicates the taxes are all in addition to the price shown in the PCU Setup screen for the pump it is assigned to.
-

The next step is to assign the Group to the pump as shown below in a slice of a PCU Setup screen under the Pumps Tab.



Screen 51 - Applying a Tax Group to a Pump

Both Pump # 1 and 2 have the Fredericton Region Tax Group applied. The drop-down menu appears at Pump # 3 when you double-click on the box. Select the Tax Group you created for this pump and save the work. Each tax will be applied to the appropriate product as it is dispensed through these pumps.

Discount Group Setup

Like the Taxes, Discounts are groups so one Discount Group can be applied to all of the discounted products an Account may purchase. In this way it is also easy to create a Tax Group for a single product for the customer who buys a significant amount on Diesel but rarely buys Gas or other products.

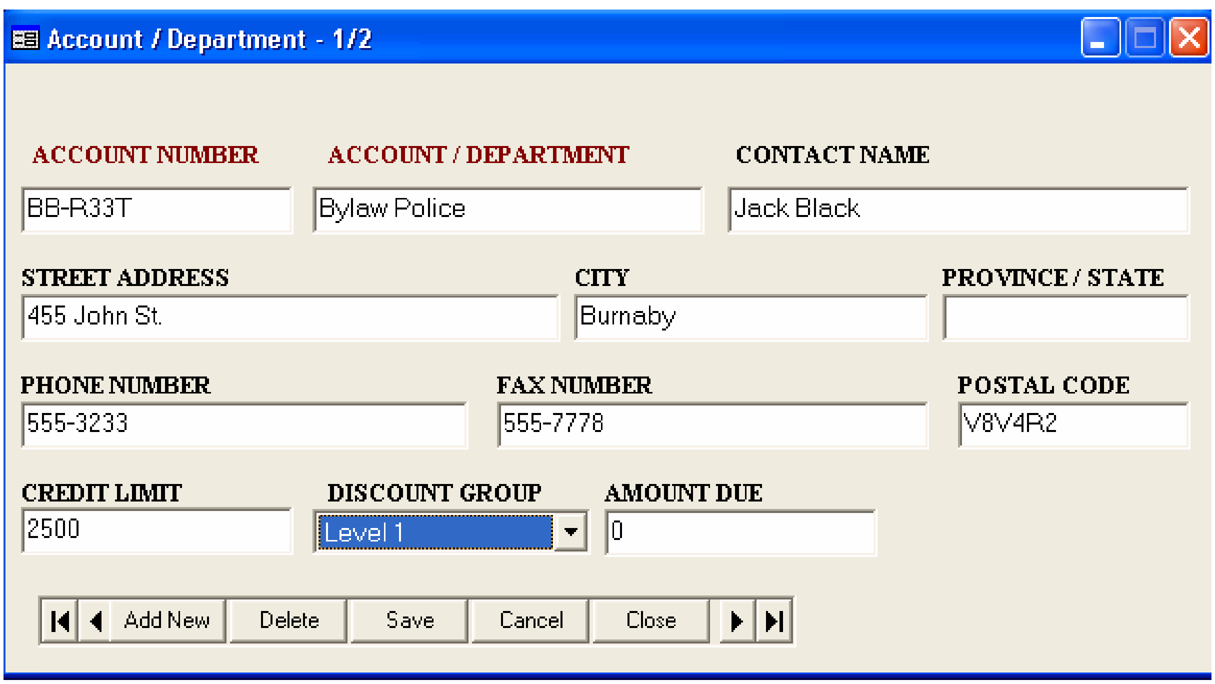
Discount Groups		
Name	Product	Rate (¢)
Level 1	DIESEL	0.0100
Level 1	LEADED	0.0100
Level 2	DIESEL	0.0200
Level 2	LEADED	0.0200

Screen 52 – Discount Groups Entry

In the example below, the generic name of Level 1 has been given to the first Discount Group in the list. Assigning this Tax Group to a customer's account provides that customer with a 1 penny per unit discount from the stated price on all purchases of Diesel and Leaded. This Discount Group will affect no other product.

Assigning the Discount Group

Assigning the Discount Group to an account is also very simple. Open the account in question using the Account button on the Main Button Tray or use Main Tables. Select the Account to which this discount will be applied.



The Level 1 Discount Group has been applied. Save your work.

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